

PLANT AND FLORAL STUDIES

W·G·PAVLSON·TOWNSEND



For Designers
Art Students
& Craftsmen.

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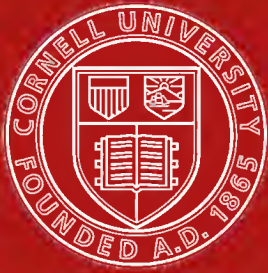
Plant and floral studies for designers,



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PLANT AND FLORAL STUDIES

Potato.

Fig. 1.

See page 8.



PLANT AND FLORAL STUDIES

For Designers,
Art Students,
and Craftsmen. By

W. G. Paulson Townsend

Author of
Embroidery; or, The Craft of the Needle,
Measured Drawings of French Furniture, etc.

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PREFACE.

A BOOK on "Plant and Floral Studies" for Designers, Art Students, and Craftsmen, may appear to many art-workers quite unnecessary. Some explanation, therefore, of the aims and object in publishing this book will, doubtless, be expected. In the first place I feel convinced that an inexpensive collection of plant studies in line, from a structural point of view, of a purely practical description, is greatly needed. At the same time I am aware that several books of acknowledged excellence, dealing with this subject and its application to design, have already appeared. The aim of this work is to be a Designer's sketch-book of plant form only. On each plate an inch scale is given; and every study has a short description, giving the time of flowering, the situation, and other details, as colour, height, etc. At times more than one plant is required for the same design, and it is helpful in making the selection to have some such information at hand, or, if it is desirable to introduce insects, birds, or animals, such notes will, I think, be found useful. From my experience, it is all too painfully evident that students are much hampered by hints or suggestive designs based on, and placed by the side of, the plant studies, and

Preface. purporting to show how to adapt the natural forms to surface repeating patterns, such as wall-papers, stencil, and textile coverings, or to pottery, metal-work, wood carving, etc. Young students frequently accept the scheme placed before them as the best, if not the only successful way of using that particular plant for the purpose. The idea may be exceedingly good, but it is not the student's. He may have been saved a little thinking, but it may have the effect of retarding the development of his own individuality, which is the most lamentable.

SEVERAL excellent books on plants, reproduced by photographic processes, are now obtainable, and for the general reader such illustrations serve the purpose admirably, but for the Designer there is much more required than is usually given. A slight line drawing from nature, intended to be utilized for design, may strike some of those stimulating notes which present themselves to an ornamentist, thereby acting as an inspiration for an applied ornament, while fully expressing the characteristics of the plant, and the salient facts of growth combined with truth. A photograph is exceedingly useful when a reliable drawing cannot be had, or the special plant you require is unobtainable. Such works as Curtis's "Londinensis," or Sowerby's "Botanical Magazine," and more recent productions of this description, valuable and

thoroughly satisfactory as they are to the Botanist, are not what the Designer requires; he is working in a totally different direction; and they certainly miss many of the most precious and interesting features that an art-worker is in search of. "Plant Form," by F. E. Hulme—which is, I believe, now out of print—has been of great service to the Designer; so also has "Plant Studies," by G. C. Haite. The latter contains an invaluable collection of interesting details with the text, the fine, large plates being vigorously drawn. This work also is out of print, and therefore practically impossible to obtain.

PROBABLY the foregoing explanation will be a sufficient justification for the appearance of these studies. I will also add that, however perfect or conscientious any other person's studies from nature may be, your own are unquestionably the best for you to work from. With the plant before him, innumerable beautiful qualities present themselves to an observant person, qualities which cannot be found in the most perfect and exhaustive information obtained from other sources. Many advanced Designers have, by adding to their collection a plant drawing or two whenever opportunity occurred, become possessed of valuable and extensive portfolios of material which have taken years to accumulate. Every student should do likewise, and only use

Preface. such a book as this when he cannot obtain the particular flower he wants. My intention has been to make these Studies next best to your own; at least, I can vouch for their truthfulness; and I hope they will be of service to those who require such material.

FROM John Gerarde's "Herball," printed in London in 1597, I have reproduced a number of plates; also one from Dr. Leonharto Fuchs's "Historia Stiripium," printed in Basle in 1542. All these drawings are fine examples in line, remarkable for their natural truth and decorative feeling.

I HAVE to thank Miss A. M. Warren for allowing me to make a line drawing from her water-colour study of the Small-leaved Briar Rose, Figs. 22 and 23; Mr. C. H. Rogers for Figs. 26, 27, and 87; and for helping me with Figs. 19, 21, 61, 82, 84, 99, 100, and 101; and Mr. C. D. Walters for Figs. 16, 77, and 78; and for assisting me in obtaining material for Figs. 2, 3, 4, 5, 6, 7, 13, 14, 28, 30, 38, 39, 48, 75, 76, 80, 89, 96, 97, etc. To the Authorities at Kew Gardens my thanks are due for help in various ways in preparing these drawings.

W. G. PAULSON TOWNSEND.

March, 1901.

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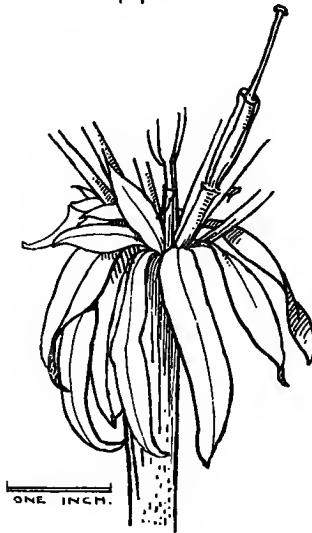
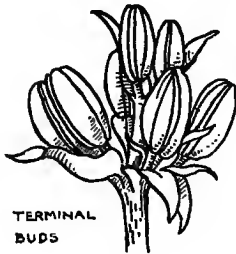
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Yellow Lily.

Fig. 2.



Yellow Lily.
Lilium Croceum.
Fig. 3.



IN a pyramidal cluster at the summit of a round, erect stem, growing three to four feet high, are the large flowers and buds; their stalks, springing from a whorl of leaves, below which is a space of three or four inches, then the leaves commence, evenly distributed round the stem, and continue to the ground; are lance-shaped, with a smooth, clean edge.

FLOWERS. Yellow, opening from three and a half to four inches across, consisting of six spatulate petals, each narrowed at its base into a short grooved claw, six stamens and one club-shaped stigma.

PLACE. A well-known old garden plant.

TIME. July—August.

Dahlia.

Fig. 4.





Dahlia.
Frustranea.

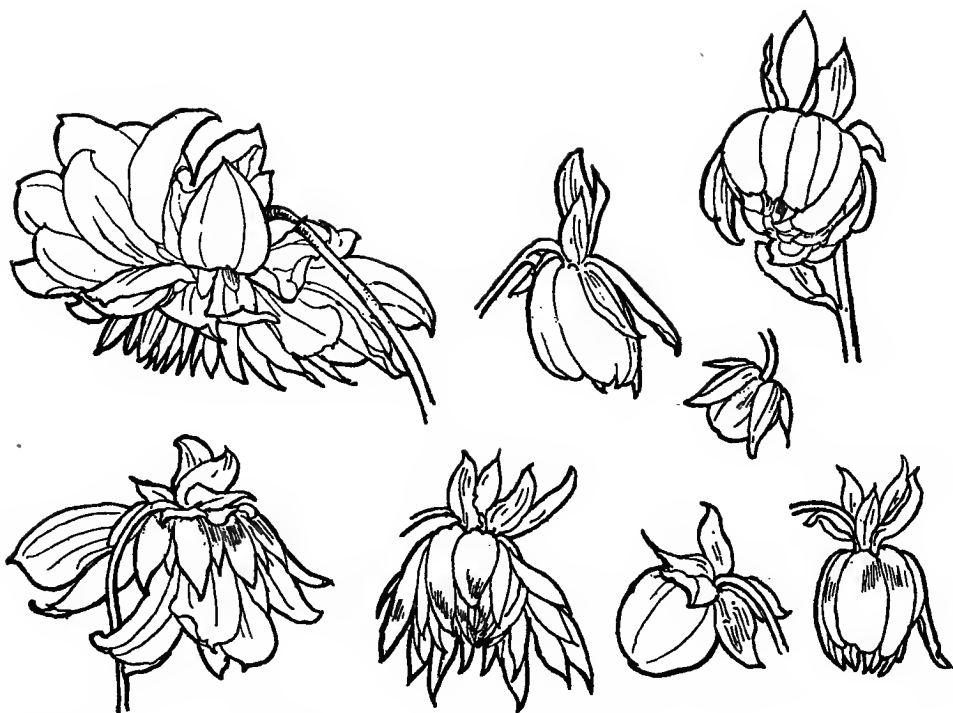
THIS Dahlia grows from seven to eight feet high ; it is very bushy owing to the much branched stems. The numerous oval leaves, tapering to the point, are serrated, roughish beneath, and a good rich green ; placed on long, slightly winged stalks.

FLOWERS. Have a spreading outer involucre and a grainy receptacle. The reflexed sepals are an interesting and important feature, particularly marked on the bud forms. The flower having many irregular petals, is not unlike a chrysanthemum ; there is, however, great variety amongst them, both in form and colour. This Dahlia was a deep scarlet.

Dahlia.

Fig. 6.





Dahlia.

Fig. 7.

PLACE. A native of Mexico, where it flourishes in sandy tracts at a height of 5,000 feet above the sea level. It thrives in our gardens in this country.
TIME. July, until late in the Autumn.

Broad Bean.

Vicia Faba.

HAS a strong, branched, slightly-ribbed stem. The leaves are large, single, wavy, and oval, tapering a little towards the point. The flower-stalk springs from the leaf-stalk joint, which is neatly clothed with an arrow-shaped stipule. The lower ones are toothed and wrap round the stem, forming a sheath.

**Broad
Bean.**

Fig. 8.



Broad Bean.

FLOWERS are white with large black marks on the inside petals, butterfly-shaped, composed of a standard petal, with wings and ridge petals partly covering. The long tubular calyx four or five toothed. Fruit in large pod.

PLACE. Common in every kitchen garden in this country.

TIME. Flowers July—August.

Potato.

*Solanum
tuberosum.*

See Fig. 1.

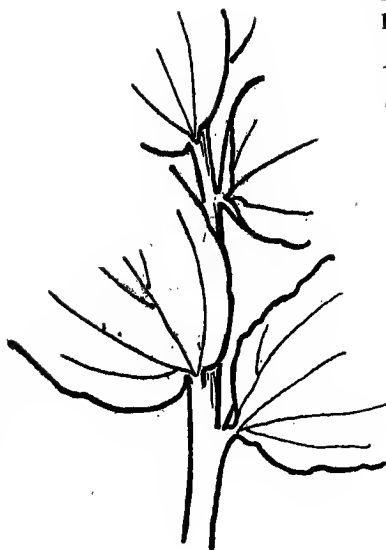
THE round, straight, herbaceous stem growing from two to three feet high, has many branches. The leaves are very unequal both in size and shape, alternating with the large couples are very minute ones. Ancient writers described the leaf-stem, with the various leaves attached, as: "A great leaf made of divers leaves, some smaller, and others greater, set together on a fat mid-rib in couples"; of a fresh green colour. From the base of the leaf come forth large, round, slender foot-stalks upon which grow the light blossom.

FLOWERS. Composed of an entire white leaf, cleft deeply in five places, with a crimped edge. A pale green stripe or fold down the centre of each petal-shaped piece, and in the middle of the flower stands a yellow five ribbed elliptical form, out of which projects a small sharp green spike. The flowers cluster five or six together on separate stalks.

PLACE. Brought from Peru in 1597; common in every kitchen garden in this country.

TIME. Flowers June—August.

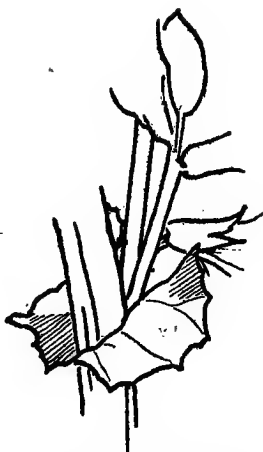
Broad
Bean.
Details.
Fig 9.



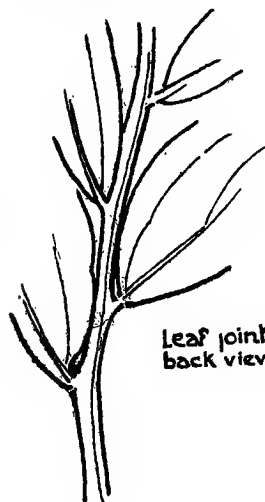
Leaf joint
front view



Leaf joint
side view.



Leaf clasping stem.



Leaf joint
back view.

**Vegetable
Marrow.**

Cucurbita ovifera.

THE vigorous growth and energy of this plant is most refreshing. It is full of valuable suggestions to the art-worker. The strongly ribbed, angular stem, pushing its way along the ground with determined twists, has, at irregular intervals, an erect leaf stalk, with flower stalk, tendril, and frequently two bracts shooting up together; the leaves are large, rough, and deeply cut into five lobes, with a strongly-serrated edge: the young leaves are considerably smaller, but in form much the same as the fully developed ones.

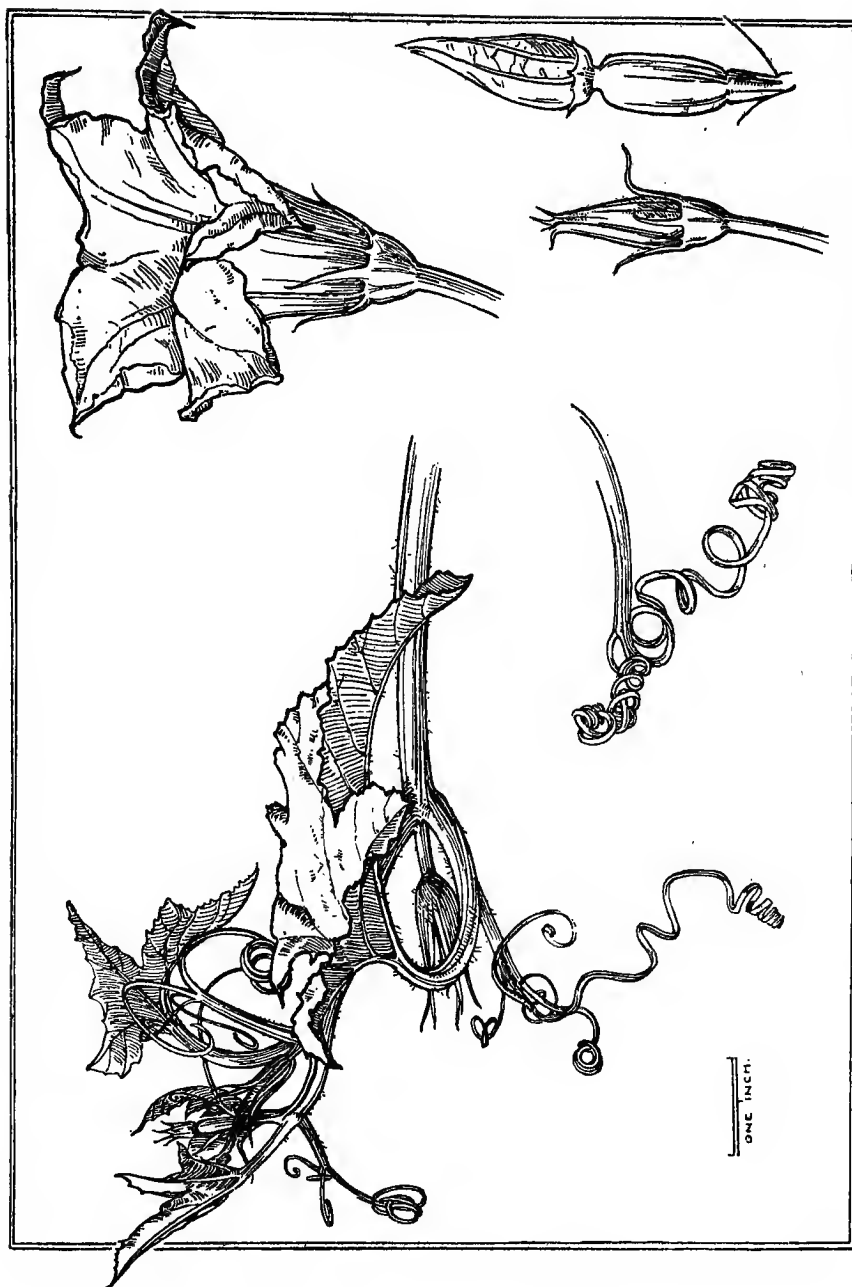
FLOWERS are great, deep yellow, bell-shaped, with five crimped tender petals; at the end of each is a sharp point, reflexed, the edge of the petal is rolled or curled inwards: the calyx has five long spikes, and is ribbed; the fruit is large, sometimes egg-shaped, usually a flattened elliptical form; on *Fig. 11* is drawn a young marrow, with the dying, but still yellow flower petals on the end; the marrows are ribbed, and striped a yellowish grey green.

PLACE. A common garden plant.

TIME. Flowers July—Sept. Fruit on at same time.

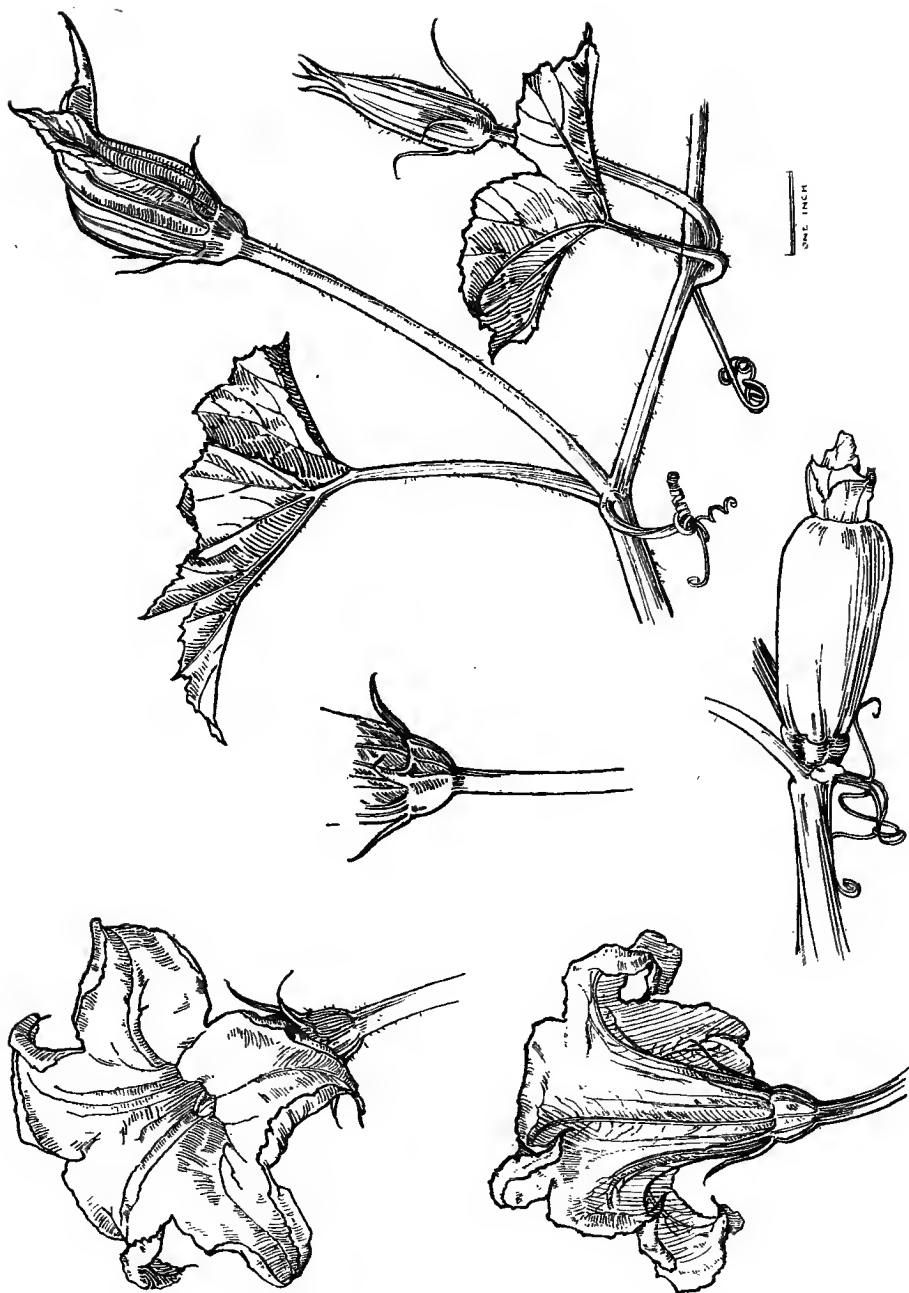
**Vegetable
Marrow.**

Fig. 10.



**Vegetable
Marrow.**

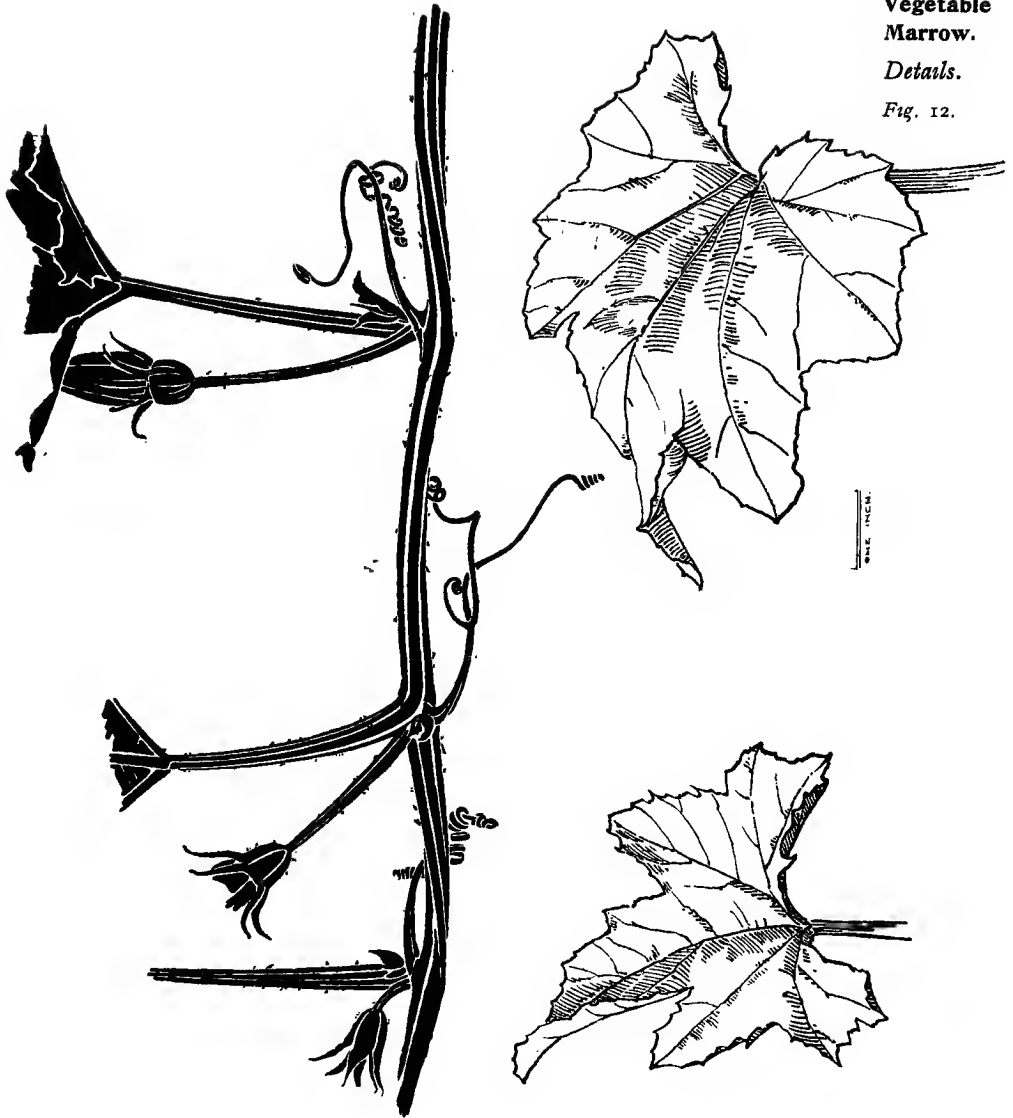
Fig. II.



**Vegetable
Marrow.**

Details.

Fig. 12.



Sea Kale.

*Crambe
maritima.*

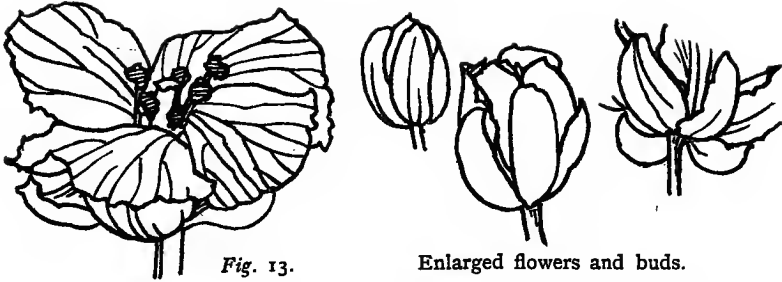
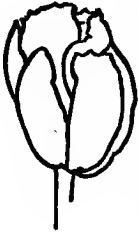


Fig. 13.

Enlarged flowers and buds.



THE stem is smooth, round, and freely branched, growing from one and a half to two feet high, bearing small white flowers at the top. The leaves are large, broad, very thick and curly, rather waved edges with many serrations and a strongly marked

mid-rib, from which the veins branch out to the margin. The colour is a pale greyish green.

FLOWERS. Composed of four petals, six stamens, pistils, and calyx of four sepals, each growing at the end of a long foot-stalk, crowded together in a large group. The round knob taking the place of the flower contains a blackish seed, one or more in each vessel.

PLACE. Grows naturally upon the sea shore. In the West of England the poor people have, from time immemorial, been in the habit of watching when the shoots of the leaflets commence pushing up the sand and gravel in the early spring, when they cut them off underground, the same way as *Asparagus* is gathered, and boil them, thus making an inexpensive and wholesome dish.

TIME. Flowers May—June.

Sea Kale.

Fig. 14.



**Great bastard
Woode.**

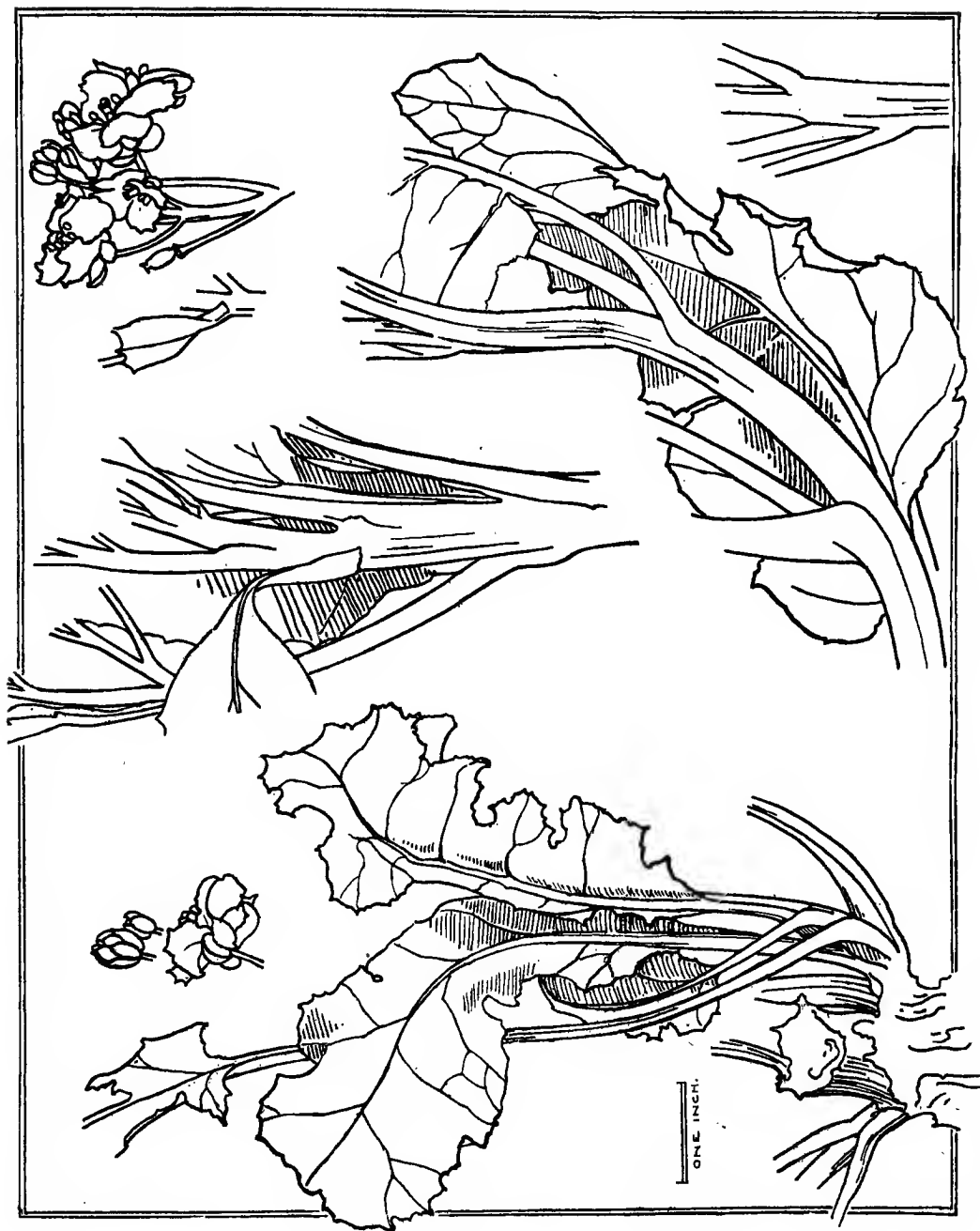
From Gerarde's
Herball.

Fig. 15.

See page 20.



**Sea
Kale.**
Fig. 16.



Leaves growing from root.

**Single
Hollyhock.**

Althæa rosea.

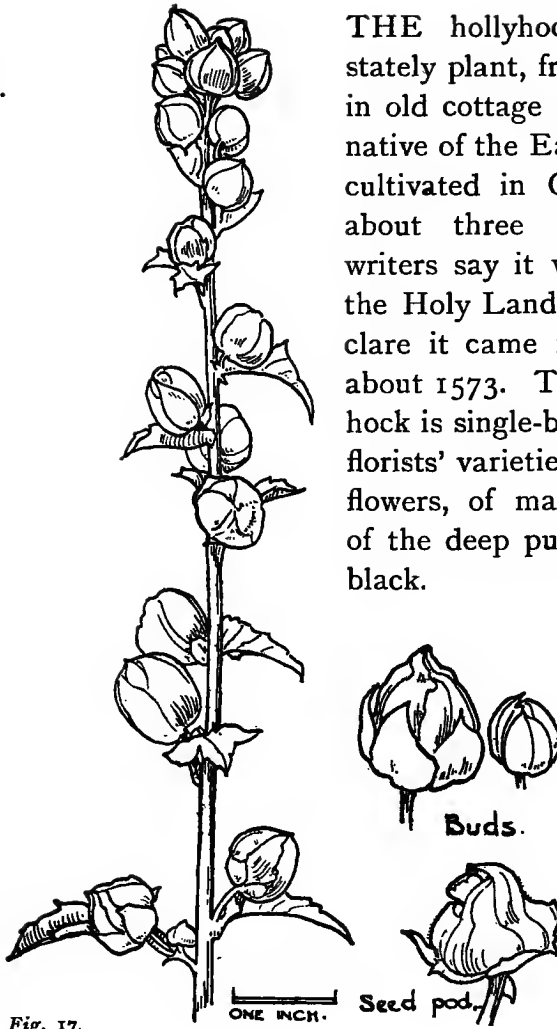


Fig. 17.

THE hollyhock is a tall and stately plant, frequently met with in old cottage gardens. It is a native of the East, and has been cultivated in Great Britain for about three centuries; some writers say it was brought from the Holy Land, while others declare it came from China in or about 1573. The ordinary hollyhock is single-blossomed, but the florists' varieties have all double flowers, of many colours, some of the deep purple being almost black.

GROWING from five to seven feet high, on a straight, well-clothed stem, are the buds at the top; usually ten or twelve inches lower they are bursting into flower; and

lower still are the full-blown flowers. Then follow the young well-distributed leaves, gradually becoming larger as they approach the ground: the largest of these, measuring from seven to eight inches in



**Single
Hollyhock.**

Note stem
cut at A.A.

Fig. 18.

**Single
Hollyhock.**

length, are a good width, divided into five, sometimes seven lobes, with many small serrations, of a whitish or milky green colour.

FLOWERS white, pale yellow, pink, red to purple, with many petals, each overlapping its neighbour, on one side, in the form of a whorl; calyx of five sepals, on short footstalk, from the axil of small leaf: the seed vessel is a round knob.

PLACE. Common in gardens.

TIME. Midsummer.

**Great bastard
Woade.**

*Segamoides
Salamanticum
magnum.*

Fig. 15.

THE great bastard woade has many very long leaves with broad ends tapering towards the stalk, placed in an irregular fashion upon a thick, erect, strong stalk, on the top of which grow clusters of small white flowers; followed by small seeds which are used for feeding birds. The root is thick and of a woody substance.

PLACE. Grows in rough and stony places; a stranger in England.

TIME. Flowers May and June, shortly after the seed ripens.

**White
Columbine.**

Fig. 19.

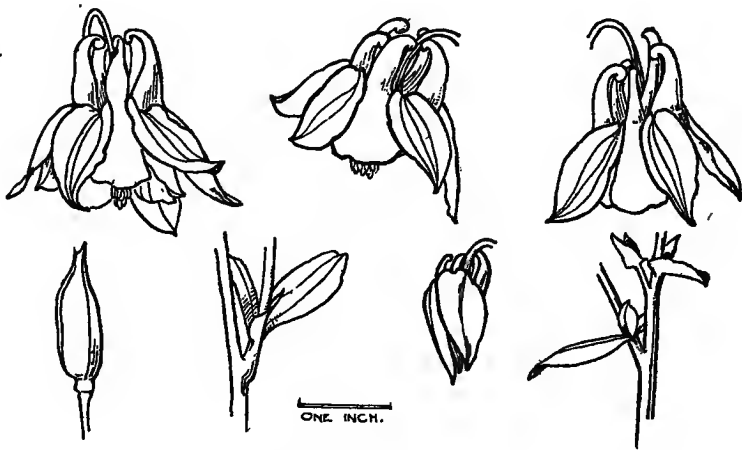


**White
Columbine.**

Aquilegia vulgaris.

THE columbine grows about two feet high; the stem is round, smooth and branched. The broad leaves are divided into three large lobes, which are subdivided with rounded teeth, and of a deep, rich green colour; the leaf stalk spreads into a beautiful sheath as it joins the stem, and usually the great leaf stalk has a flower stalk starting from the same joint; the young leaves, which frequently grow in threes, are small and narrow.

Fig. 20.



FLOWERS. Solitary, nodding on curved stems, composed of five trumpet-shaped petals, which rapidly narrow into long, slender hollow spurs, rounded at the top, and united below by five spreading sepals, between which the spurs ascend and curl inward towards the stalks. (The Latin name *Aquila* was doubtless given to this plant from the spurs suggesting the claw of an eagle.) There are numerous stamens and five pistils. The seed

**White
Columbine.**

(Details.)

Fig. 21.



**White
Columbine.**

vessel, which appears as the flower falls, is a long tapering form ending in a sharp point, with five divisions.

PLACE. Old gardens, and in high woods and rocky places.

TIME. May—July.

**Small-leaved
Sweetbriar
Rose.**

Rosa sepium.

Fig. 22.



THE sweetbriar rose is an erect bush from two to four feet high, with rather short compact branches. It has numerous unequal prickles, large ones incurved and sometimes nearly half an inch long, smaller ones slender and nearly straight. The leaflets are oval or elliptical, tapering a little towards the end, doubly serrate, dark green, and slightly hairy above, rather paler and hairy beneath. The adherent stipules at the base of leaf-stalk is a valuable and exceedingly decorative feature.

FLOWERS. Composed of five petals, rose colour, stamens yellow with pale green centre. The five sepals are very much jagged. Flowers measure from one and a quarter to two inches in diameter.

PLACE. In hedges, bushy places, and sea-shores.

TIME. July—August. Fruit ripening in October.

**Small-leaved
Sweetbriar
Rose.**

Fig. 23.



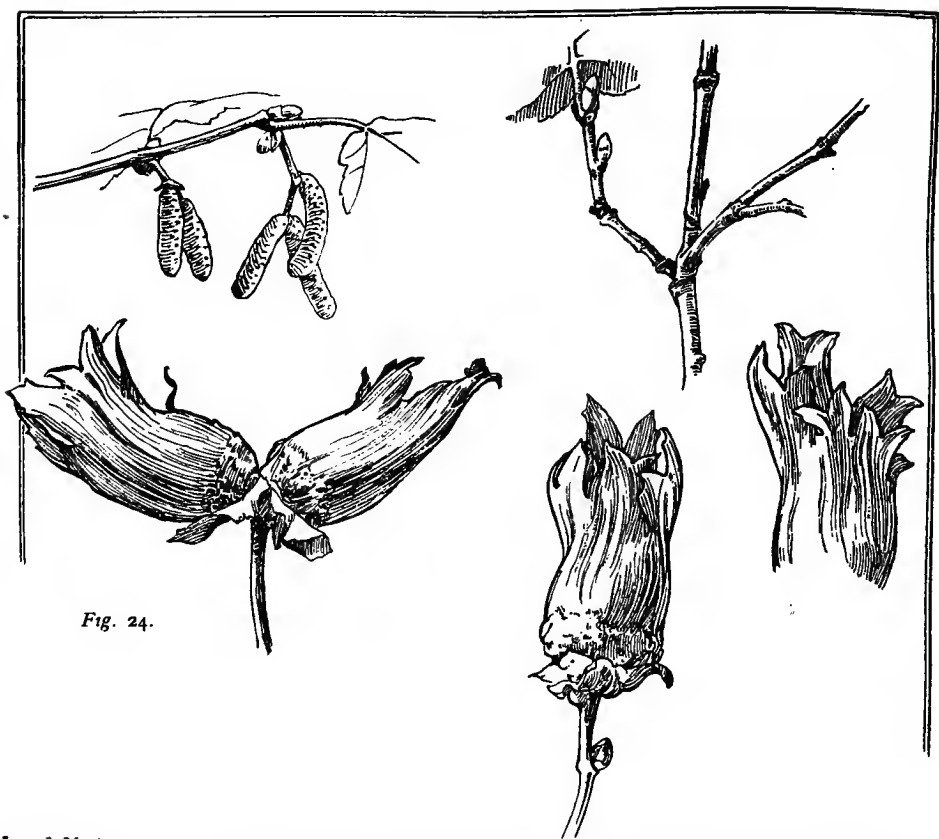


Fig. 24.

Hazel Nut.

Corylus avellana.

THE hazel tree grows from four to ten feet high ; the bark is smooth and grey, with a downy covering on the branches of the year. The shortly-stalked leaves vary from two and a half to four inches in length ; they are doubly serrate with secondary veins running straight from the midrib to the margin, and are a nice fresh green with lighter green backs ; the terminal leaves are often a dull purplish red. In the autumn male catkins, or lamb tails, as the country people call them, appear on the axils of the leaves

**Hazel
Nut.**

Fig. 25.



Hazel Nut.

on the shoots of the year, usually two or three together. These do not, however, open until the early spring, and measure from one and a half to two inches; catkin scales, pale yellow with purplish tips. The leaf buds, from which protrude the crimson stigmas, resemble the flower buds.

NUTS. Cluster in twos and threes, and occasionally five, each measuring about three-quarters of an inch. The nut is wrapped in a ragged-edged, cup-shaped husk with a large basal scar, of a soft green until nearly ripe, when it changes to a mellow golden brown.

PLACE. England, Scotland, and Ireland, in woods, thickets and hedges.

TIME. Early spring. Fruit ripe in autumn.

Sea Poppy.

Glaucium luteum.

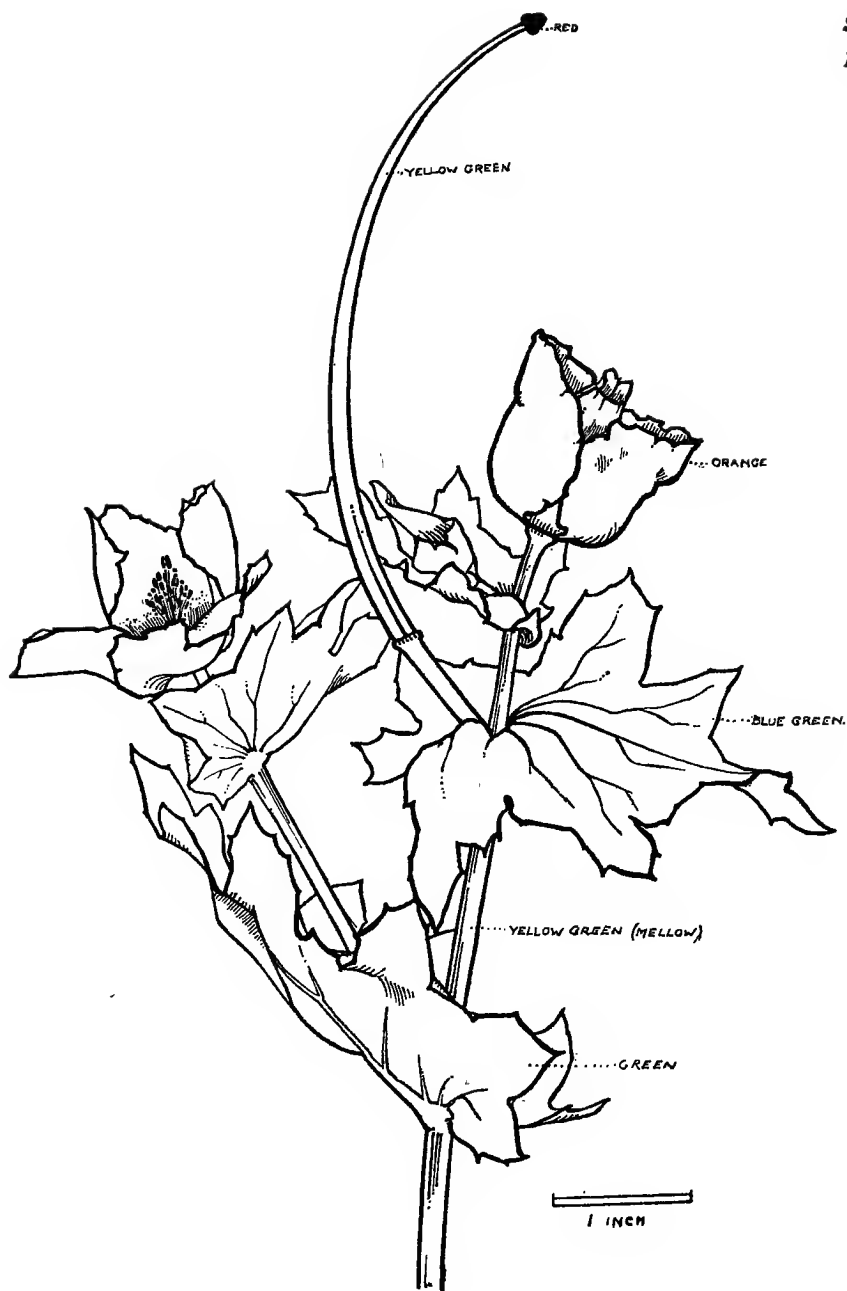
THE name given to this poppy in old herbals is "The Horned or Coddled Poppie." While there is great variety in the shape of the leaves, in principle they are not unlike the leaves of other poppies. The colour is a beautiful blue green: the stalks a soft yellow green, round and somewhat rough. FLOWERS. Four petals, in the centre of which is a small cod surrounded by stamens. As the flower fades the petals and stamens fall away and the cod or seed vessel grows, sometimes to the length of six, seven, or even eight inches. The flower is a deep yellow or orange, the cod a yellow green, terminating with a red anther.

PLACE. By the sea-side and in rough waste places.

TIME. Flowers in July or August.

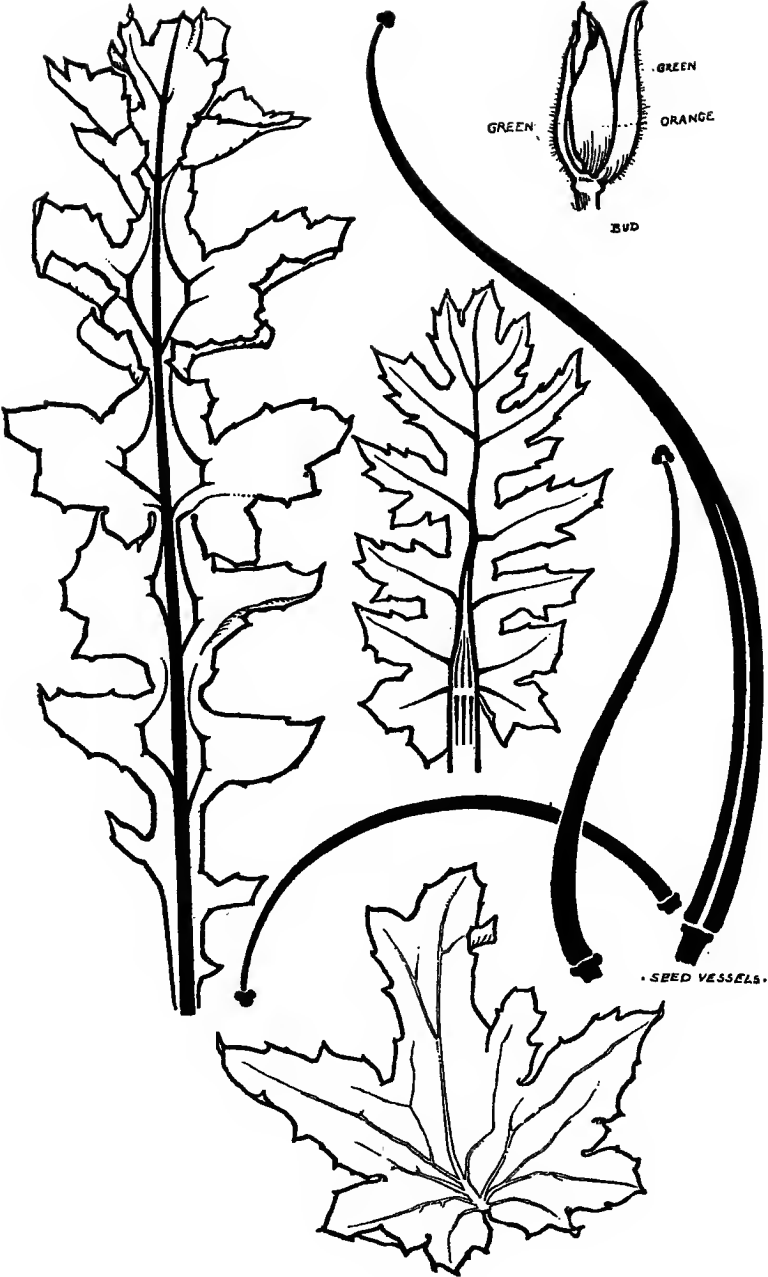
Sea Poppy.

Fig. 26.



Sea Poppy.

Fig. 27.



**Purple
Martagon Lily.**

Fig. 28.



**Purple
Martagon Lily,
or
Turk's Cap.**
Lilium Martagon.

THE martagon, or turban-shaped lily, has an erect, strong, stout stalk ; it grows from eighteen inches to four feet high. The bulb is about the size of a greengage plum, with pale yellow fleshy scales. The leaves grow from five to eight in rather remote whorls, except when approaching the flower they are simply distributed, furnishing the lower flower stalks with one or two small leaves. The terminal flower-stalks are usually without foot-leaves ; the largest leaves are from three to seven inches long.

FLOWERS. About an inch and a half across, varying in colour from dull purple with blackish spots to dull flesh colour with dark red spots. The bell-shaped body is composed of six spreading petals, which curve backward, six stamens with reddish maroon anthers ; and one club-shaped pistil.

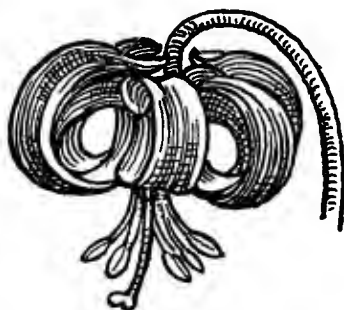
PLACE. Low meadows and moist places, well distributed.

TIME. June—July.

**The Red Lily of
Constantinople.**

From Gerarde's
Herball.

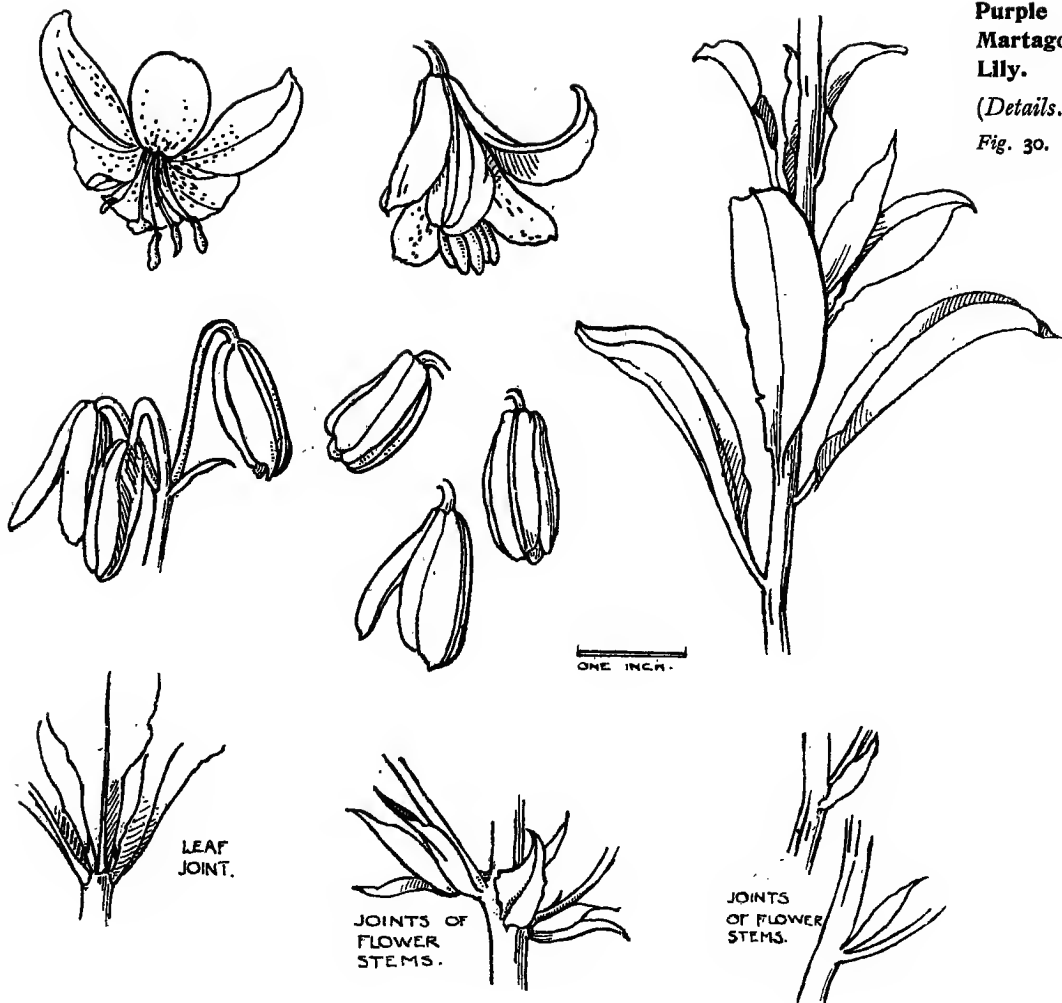
Fig. 29.



**Purple
Martagon
Lily.**

(Details.)

Fig. 30.



Arbutus.
Unedo.

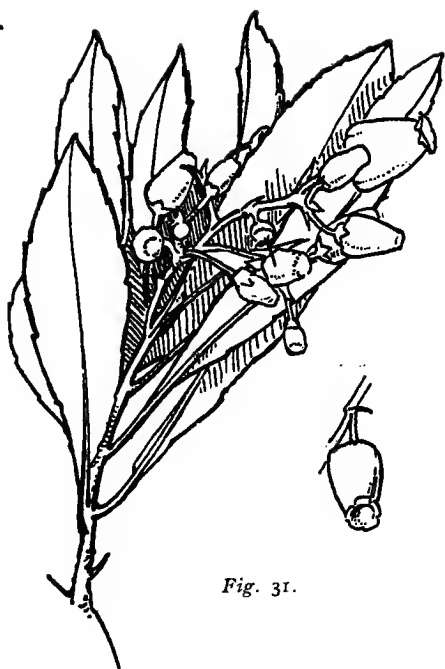


Fig. 31.

THE arbutus or strawberry tree never grows very high in this country. In size it may be compared to the quince tree. The rough bark is rather a reddish brown, the boughs stand very erect and thick towards the top of the tree. The leaves are stout, simple shapes, slightly serrated, with a smooth, dull, glazed surface, not unlike Bay leaves. They are a mellowish green, with touches of yellow and red on their edges. The flowers are numerous and grow in

bunches at the termination of the stems ; they are a soft greenish white, tinged with purple. The berries, which take the place of the flowers, hang down in clusters from 3 to 10 ; the short stems which carry them are a purplish red. These berries first appear green, and when ripe become a gallant scarlet, with a very rough surface ; as food they are much appreciated by thrushes and blackbirds.

FLOWERS. Pretty hollow urn shapes, with the top edge turned back and split in four or five places. The calyx is small and has four divisions.

PLACE. About the Lakes of Killarney : in the woods in Muckross, and at Glen Gariff, near Bantry.

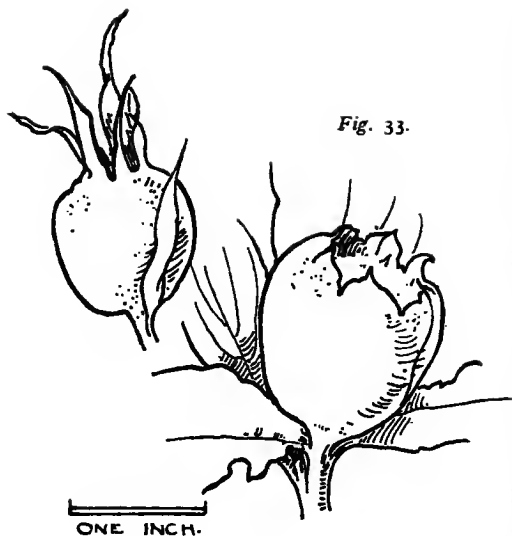
TIME. Flowers in the Autumn, fruit ripe in November and December.

Arbutus.

Fig. 32.



Medlar.
Mespilus
Germanica.



THE medlar has been described as a plain little body, without a touch of animation even in its colour, to remove it from the unimportant position it occupies; appearing to have commenced life with the hope of some day becoming an apple, and to have finished by posing as an emblem of its own withered hopes. The

medlar is, however, a strong character, and it has many points that recommend it to the designer. The stems are strong and knotty and of a brownish colour. The fruit is usually comfortably seated in a nest of large, long, and rather obtuse-shaped leaves. The leaves are a warm green, turning to yellow and red in October; the fruit a soft yellow, ultimately becoming a deep golden brown.

FRUIT. Is fairly round in shape, tapering slightly as it approaches the stem. On the top is a crown formed of five or six sepals, huddled together like the slashed ends of a close-fitting little brown jacket; as the fruit ripens, the ends of the sepals dry and fall off, leaving a pentagonal or hexagonal opening. Through all its stages this ornamental feature is particularly interesting to the decorative artist.



Medlar.

Fig. 34.

Medlar.

PLACE. A native of the middle and south of Europe, it is found in hedges and woods in England.
TIME. Flowers August and September. Fruit gathered in October and November.

Magnolia.
Magnolia
Soulangeana.

THIS enormous cup-shaped-like flower is splendid material for the designer. In early summer the buds burst forth into flower before the leaves appear to have made up their minds to show themselves. The beautiful ivory-white flowers, touched with pink and purple at the base, with the strong mellow-brown stalks, along which at short intervals are the little bunches of fresh yellow-green leaves, is a sight to be remembered. It has alternate coriaceous, thick, oblong leaves which, when matured, are a rich green above and a pale green beneath, the fruit consisting of many carpels, collected in an oblong reddish cone upon a lengthened axis.

FLOWERS. Deep cup-shaped with six petals, white tinged with pink and purple, centre spike light green, the small leaves around its base have red tips.

PLACE. Introduced from China about 1790.

TIME. Flowers about Easter.

Magnolia.

Fig. 35.



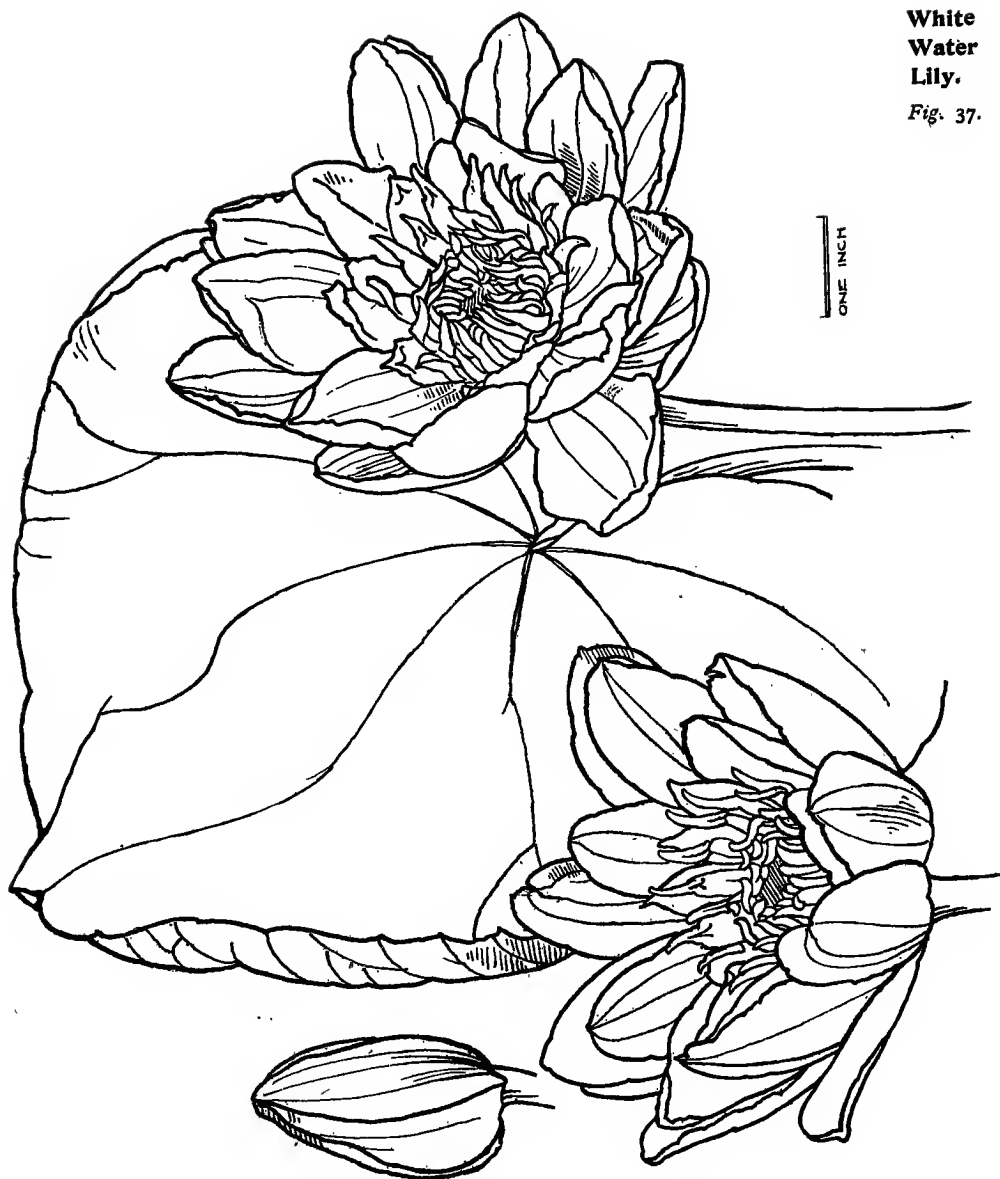
Mag-
nolia.

Fig. 36



**White
Water
Lily.**

Fig. 37.



**White
Water
Lily.**

*Nymphaea
Alba.*

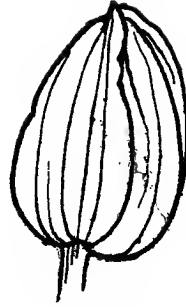
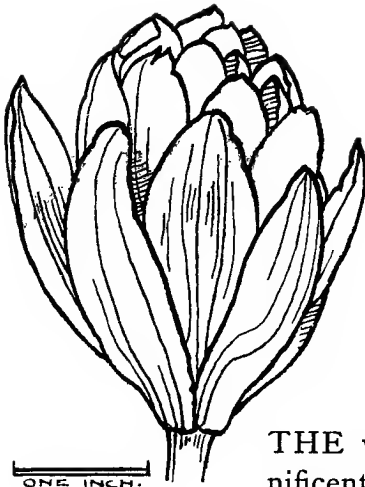
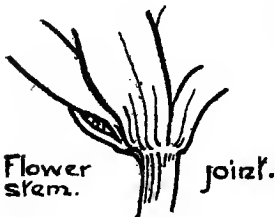
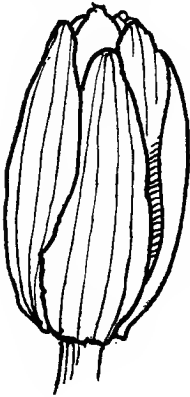


Fig. 38.

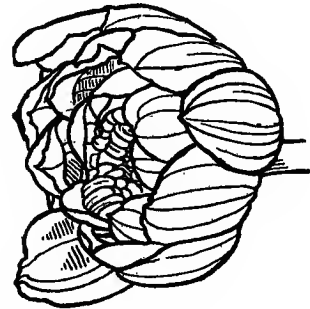
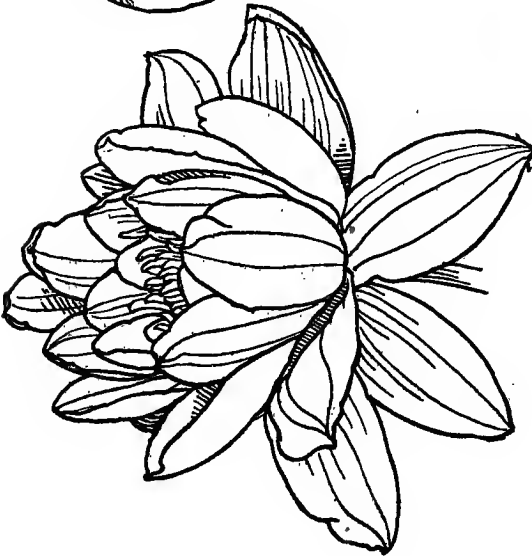
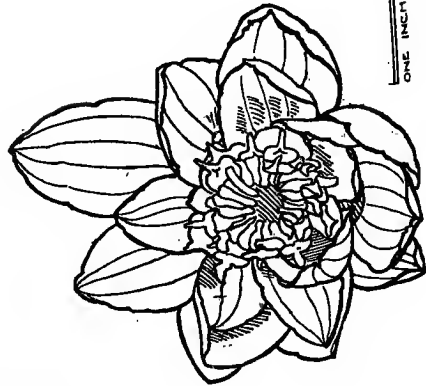
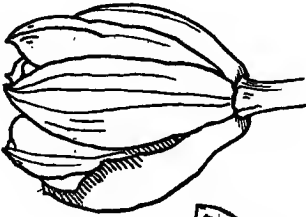
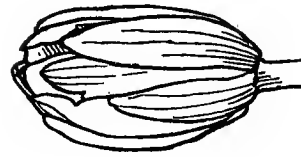
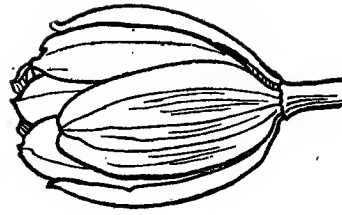
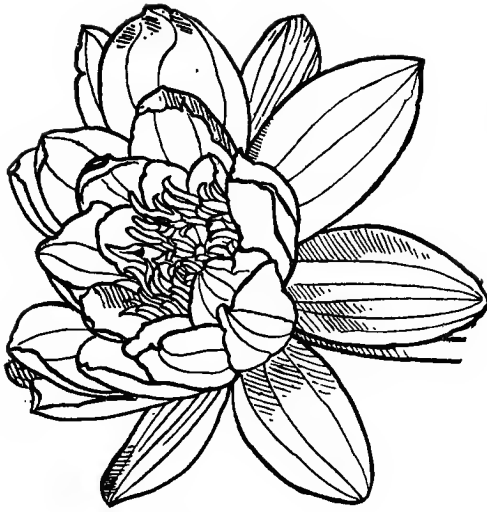


THE water lily is one of the most magnificent of our native flowers, inhabiting lakes, still waters, and slow rivers. It has a large, broad, roundish, heart-shaped leaf, which swims on the surface of the water and sometimes under, and springs up from the root on a long round stalk. The veining in the leaves grow from the stem joint to the margin; the back of the leaf is rather more marked with the small veins, and is a lighter green than the front of the leaf. The flowers rise above the water under the influence of light, and spread out during the sunshine in the middle of the day. Towards evening they close and sink beneath the surface.

FLOWER. This white water lily has sometimes four and sometimes five sepals. The petals are cordate and entire, stigma of sixteen ascending rays, which are

**White
Water
Lily.**

Fig. 39.



**White Water
Lily.**

yellow. The flower stem is long, round and smooth, like the leaf stem growing from the root.

IN the Second Book of the Historie of Plants, by Henrie Lite, dated 1578, speaking of the water lily, he says: "The flowers have in the middle many yellow threds or throoms, compassed round about with ribiy white leaves set in very good order, each leafe almost as large as ones finger, or like in proportion to the leaves of Houseleeke or Sengreen. When the flowers be past there come in their stead round knops or bolliens, whereip the seed lieth, which is large and swart."

**Yellow Water
Lily.**

Nuphar Lutea.

THE common yellow water lily has a leaf very much like the white lily. It is smaller and not quite so round, the veining, instead of springing up from the stem joint, branches from the centre or main fibre of the leaf to the margin. The stem is round and long.

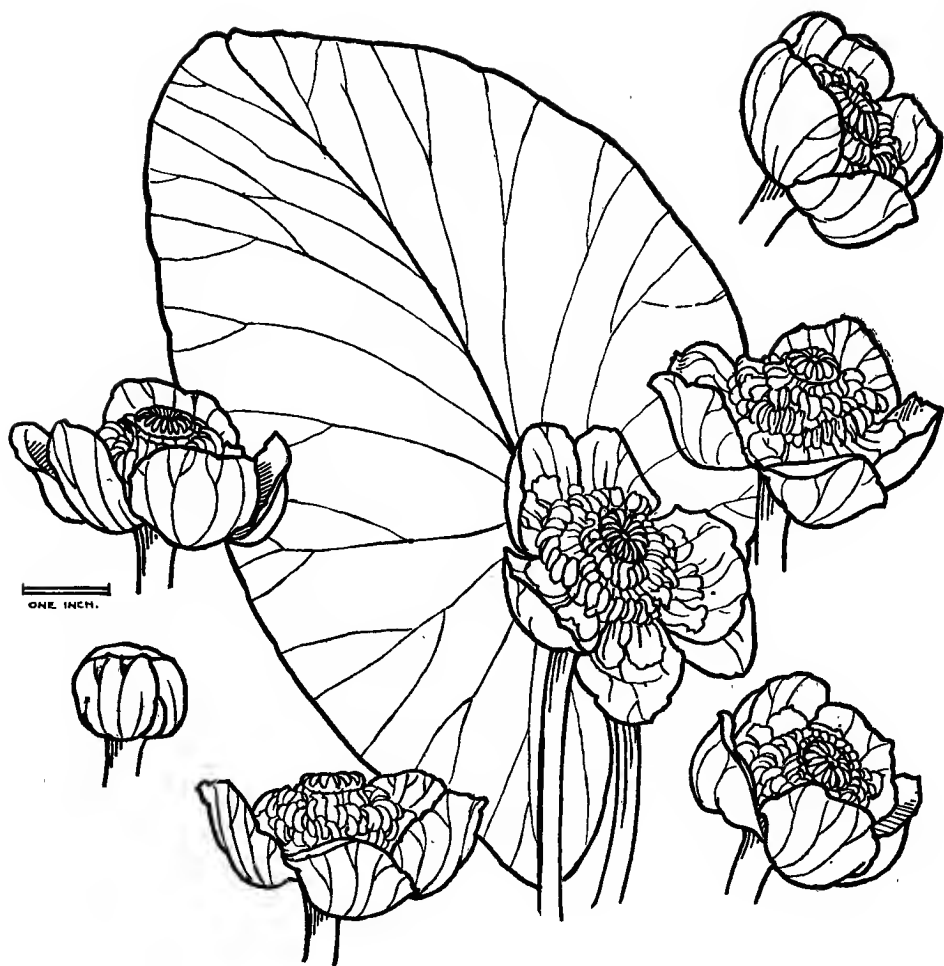
FLOWER. Is also smaller than the white lily, with fewer and rounder petals. The stigma, which is a deep yellow, is compact, with ten to twenty rays. This flower smelling somewhat like brandy, which, in conjunction with the flagon-shaped seed-vessels, has led to the name of Brandy Bottle, whence, in Norfolk and other parts of England, it is called by this name.

PLACE. Clear pools, ditches, standing waters, and slow rivers.

TIME. Flowers in July.

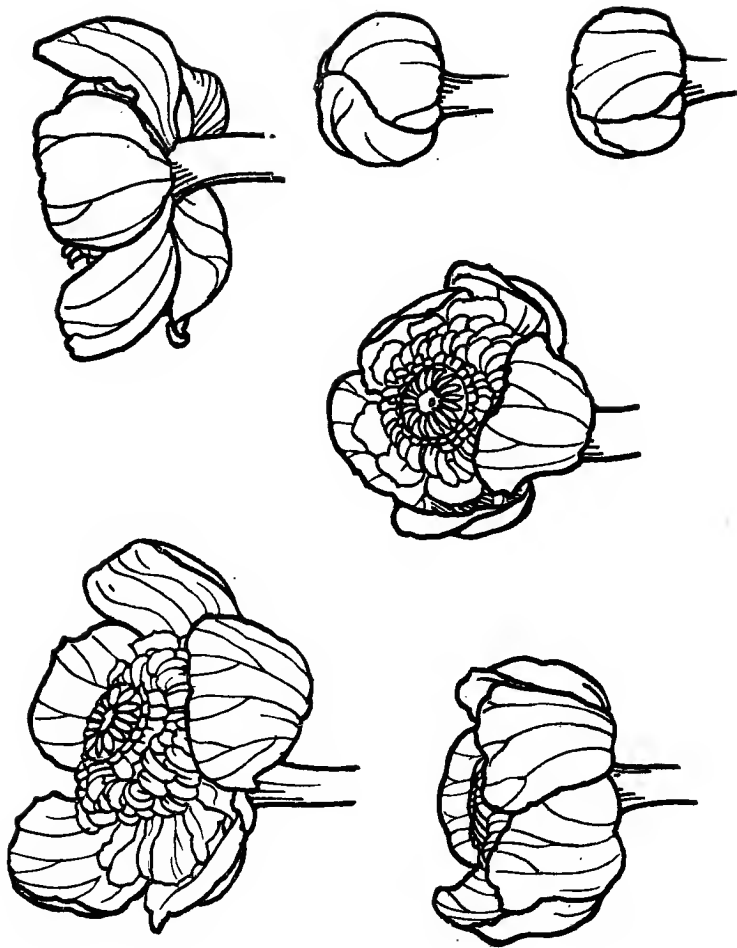
**Yellow
Water
Lily.**

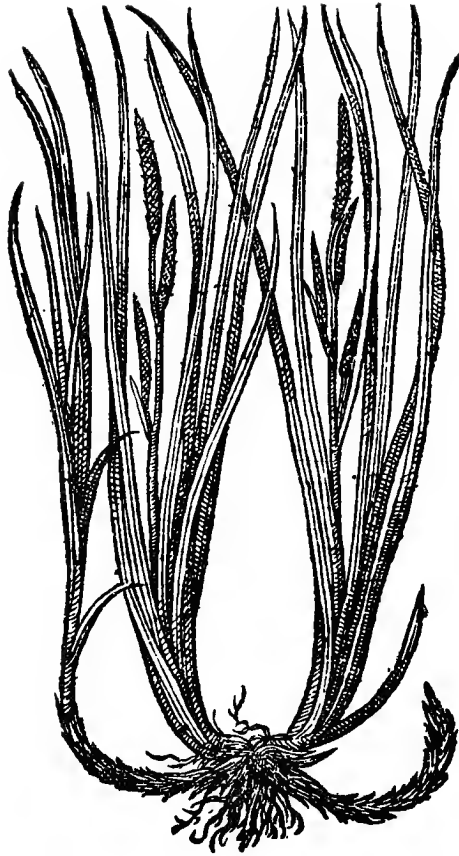
Fig. 40.



**Yellow
Water
Lily.**

Fig. 41.





Cyprus Grass.

Gramen
Cyperoides.

From Gerarde's
Herball.

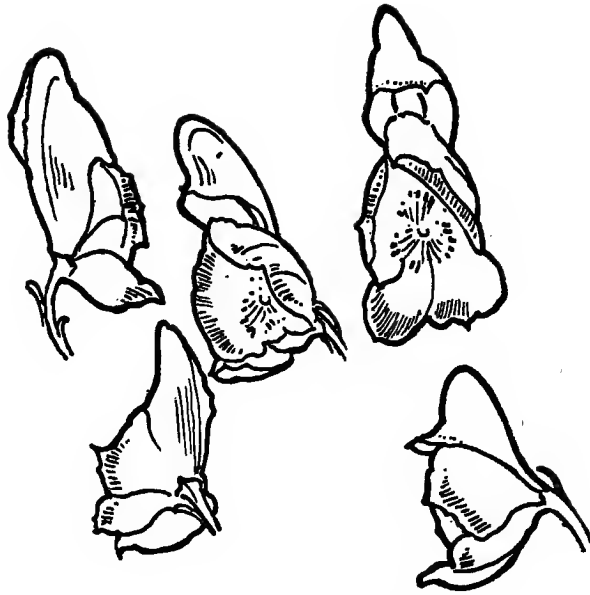
Fig. 42.

CYPRUS GRASS has long leaves resembling the common reed ; the stalk grows to the height of a cubit in some places, upon which groweth small scaly knobs or ears in the form of a spike, very tough and rugged. This grass flourishes in muddy ground, all through the summer.

**Common
Wolf's-bane,
or
Monk's Hood.**

*Aconitum
Napellus.*

Fig. 43.



THIS poisonous plant grows from two to five feet high; its growth is very upright, and the stem is simple and strong with many leaves, especially towards the base, which are lobed and deeply cut; the lower ones have longish footstalks and are placed alternately on the stem. As they near the top of the plant they are provided with much shorter stalks. The leaf is a rich deep green, the underside or back is a pale milky green. The flowers always grow at the top and terminate the stalk. To keep these drawings as large as possible, the stem is cut at A.A., and the pieces placed side by side on the same page.

FLOWER. Is without a calyx; it grows in a long spike or racemus; each flower consists of five

**Common
Wolf's-bane,
or
Monk's Hood.**

Fig. 44.



**Common
Wolf's-bane.**

petals, which include two nectaries; the top or uppermost helmet-shaped petal is arched over the side ones, giving a hooded appearance. The flower is a purplish blue, with a pale blue centre. The pistilla are three, four, and sometimes five.

PLACE. It is a native of the woody and mountainous parts of Germany, France, and Switzerland, and cultivated in many of the flower gardens in this country.

TIME. Flowers in August.

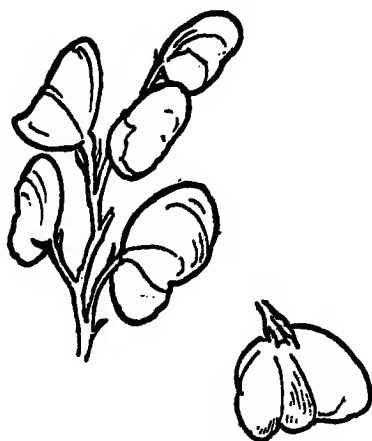
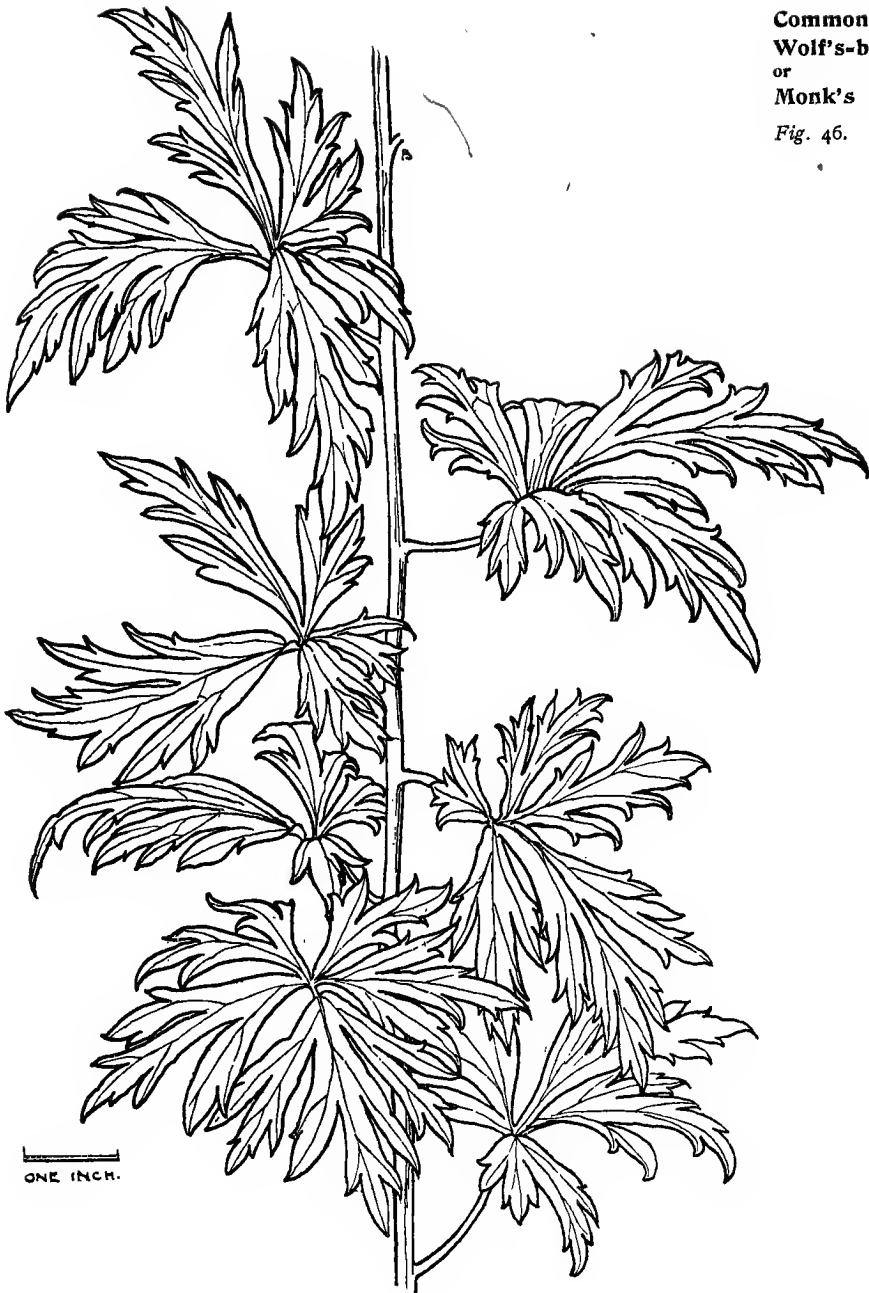


Fig. 45.

**Common
Wolf's-bane
or
Monk's Hood.**

Fig. 46.

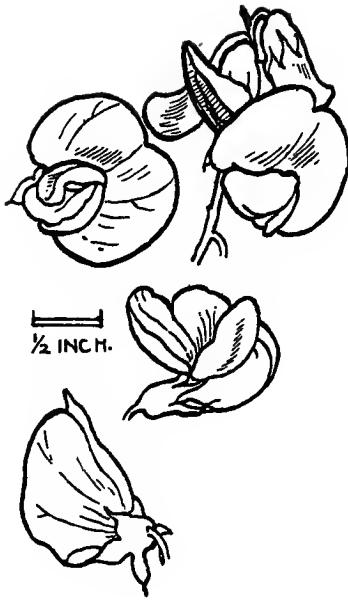


ONE INCH.

**Everlasting
Pea.**

*Lathyrus
latifolia.*

Fig. 47.



A WELL-KNOWN and much appreciated plant, which grows apace, stretching its tendrils out and clinging to every kind of support it can reach. This drawing is from the broad-leaf pea, which is doubtless a variety of woodland pea; grows to a height of six or eight feet, flowering rather early in the summer. There is a great variety of magnificent colour produced by the various kinds: this flower is a rich rose colour; the round-leaved pea is a bright rose to purple; there is also the white everlasting pea. The

leaves are alternate, usually compound, and occasionally simple. The stems are winged.

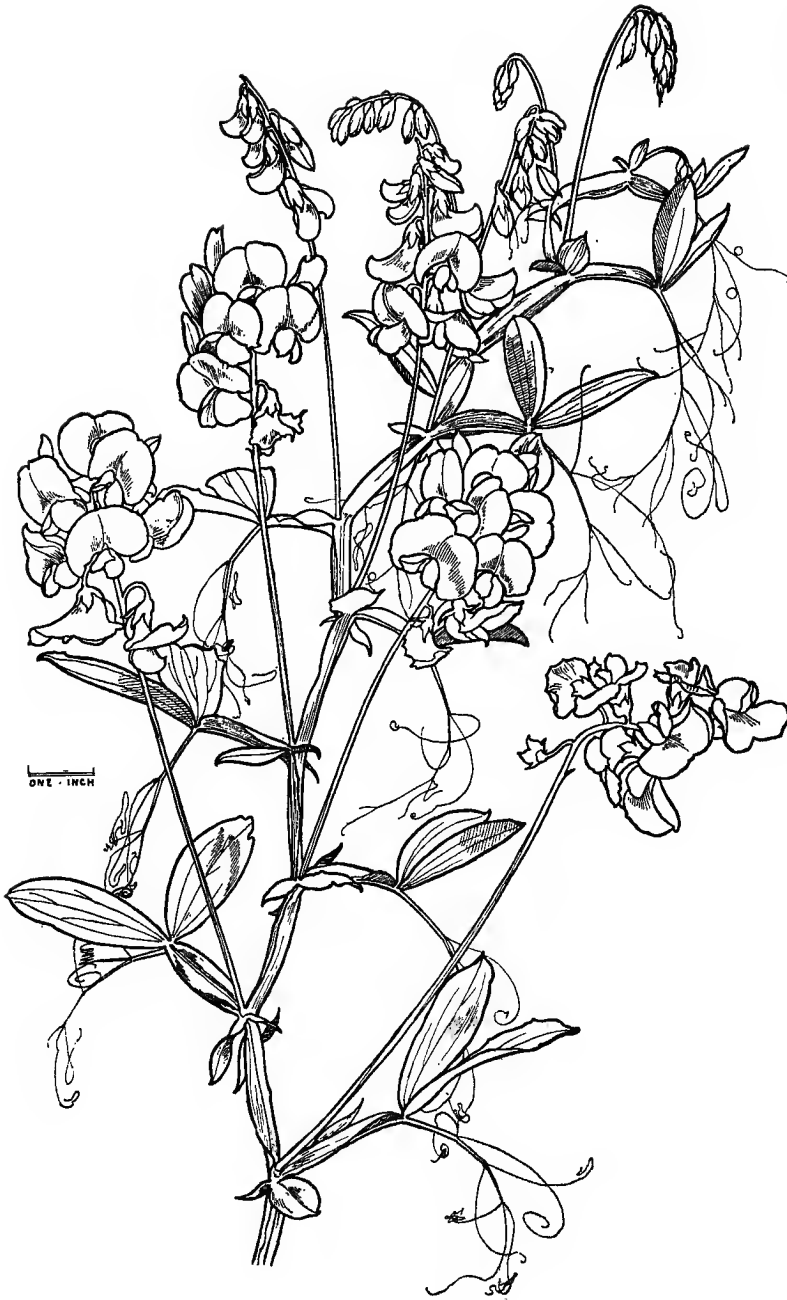
FLOWERS. These butterfly flowers are irregular, with calyx of five unequal teeth. The corolla is composed of five unequal petals, one being larger than the rest, which envelopes them. The fruit is a pod, generally dry and many-seeded.

PLACE. It has been discovered growing wild in several districts, but in most cases it has been traced to some garden from whence it had escaped.

TIME. All through the summer.

**Everlasting
Pea.**

Fig. 48.



Bind-weed.

Calystegia sepium.

OUR white hedge bindweed is familiar to everyone. By the snowy whiteness of the flowers which bespangle the hedgerows, and the vigour with which its twining stems cling in a stifling embrace about the wayside thickets prevent the most unobservant

Fig 49.



person from passing without making its acquaintance. Each stalk bears but one flower. The flower stalk or peduncle springs from the axil of the leaf. There are two heart-shaped bracts which almost

Bind-weed.

Fig. 50.



Bind-weed.

entirely hide the calyx. The leaves of the bindweed are large, and the marking of the veins on the front of them is soft in contrast to the veins on the back.

FLOWERS. The beautiful bell-shaped blossoms which open beneath the life-giving rays of the sun and remain closed when its beams are withheld, are composed of five petals joined together by delicately modelled ribs, which touch each other in the centre of the flower and gradually become narrower as they approach the margin. The flowers are usually about two inches across.

PLACE. Abundant throughout England and Ireland on the hedges and thickets.

TIME. All the summer.

Plum Blossom.

Prunis Domestica.

THE branches of the plum tree are smooth and round, of a dark brown colour; standing upon short footstalks are the pointed oval, slightly toothed leaves, very small at the time the flowers are in full bloom, developing later, at first a pale fresh green, afterwards darker, with two brownish stipules at the base of the peduncles.

FLOWER. On short stalk, consists of five roundish, white petals: calyx divided into five narrow concave segments; over twenty stamens, with stalks tapering, and inserted in the calyx. Anthers are a deep yellow.

PLACE. It is a native of Britain.

TIME. Flower in April and May.



Plum Blossom.
Prunus Domestica.
Fig. 51.

The
Pink Persicaria.
Polygonum
Persicaria.

THE general growth of the pink persicaria is erect; the stems are numerous and freely branching, in fact so free in the branching that the plant sometimes has a spreading appearance, though in the ordinary way the growth has a decidedly upward tendency, as is indicated in this drawing. The points where a lateral stem branches off swell very considerably, which is rather suggestive of the knee joint; the generic name being derived from two Greek words, signifying many knees or joints. (See A., Fig. 52.) The stems are reddish in colour. The leaves are lanceolate in form, the lower ones have stalks, the upper ones springing direct from the stem, and having at their bases sheathing stipules; sometimes the leaves are marked with a large dark purplish-black spot in their centres; hence the name of spotted persicaria, which is frequently given to this plant.

FLOWERS. At the termination of the various branches are clusters of blossom: these clusters or masses, which are cylindrical in form, are about an inch or so in length, and have a small subordinate mass at some little distance below them; this, however, is by no means a constant feature. The colour generally of the bloom is a dull reddish green: the tips of the individual flowers when in full bloom are of delicate rose pink.

PLACE. Grows freely in gardens and on waste ground. It also flourishes by our roadsides, especially in low-lying, damp localities.

TIME. July—October.

**Pink
Persicaria.**

Fig. 52.



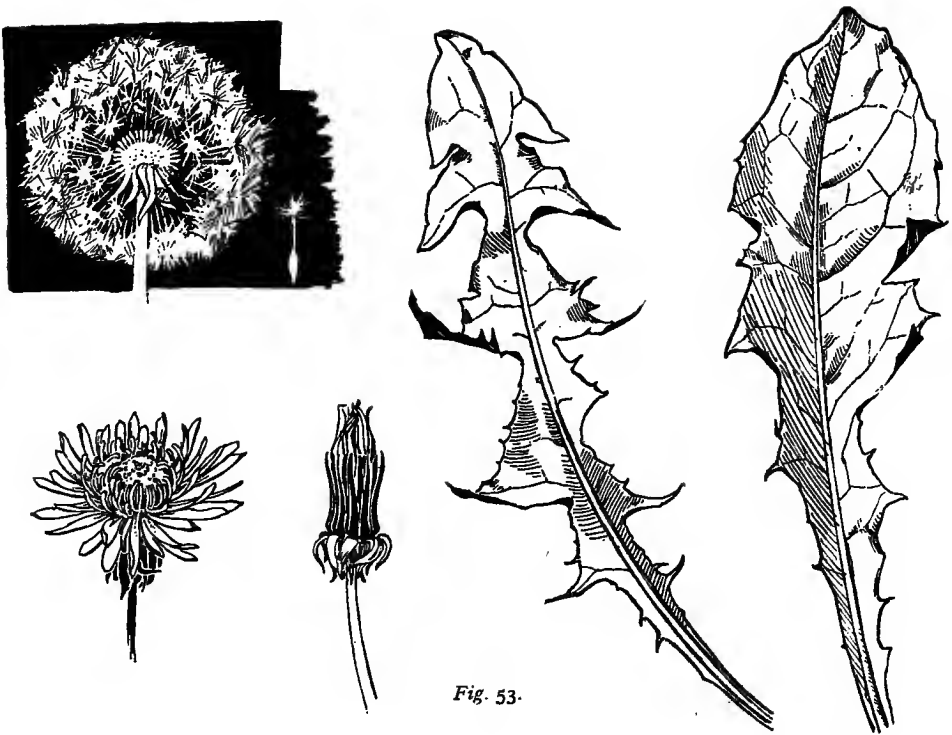


Fig. 53.

Dandelion,
Dens-leonis.

THIS common flower, growing by the wayside like a golden trimming to the dusty road, is perhaps the most flourishing of all wild flowers. The dandelion, or dent de lion (the jagged edge of the leaf suggesting a lion's tooth), is well known all the world over. The leaves, which grow direct from the root, are long, deeply cut, and gathered at the edges. There is great variety in the form, as will be seen by the two leaves drawn on this page taken from the same

Dandelion.

Fig. 54.

MUNZ
MUNZ



Dandelion.

root. The flower is solitary at the end of a long round juicy stem ; in fading it takes the form of a bud, which bursts forth into a white, airy blowball, and when caught by the wind, sails away like scores of little parachutes. The root is long and slender. John Gerarde says: "There are divers varieties of this plant, consisting in the largenesse, smallnesse, deepnesse, or shallownesse of the divisions of the leafe, as also in the smoothnesse and toughnesse thereof."

FLOWERS. Yellow, varying from one to two inches across. Has many petals, and is not unlike a chrysanthemum in miniature.

PLACE. Roadside, fields, and waste places.

TIME. Almost all the year round.

Meadow Vetch.

*Lathyrus
pratensis.*

A CLIMBING plant, growing from two to three feet high. The stems are angular. The lanceolate leaflets have large arrow-shaped stipules. The tendrils are short. The flowers grow in clusters (from three to twelve together) on long stems.

FLOWERS. Shaped like the bean flower (see Broad Bean details), a bright yellow colour, all turned in one direction. When the flower falls a long flat seed vessel, of a blackish colour, appears in its place.

PLACE. Hedges and meadows, frequently in



Meadow Vetch.

Drawing reproduced
from *Flowers of the
Engadine* by Evelyn
D. Heathcote.

Fig. 35.

Meadow Vetch. moist places, about watercourses and running streams.

TIME. June—September.

Lavender Spike.

Lavendula minor,
five spica.

From Gerard's
Herball.

Fig. 56.

See page 124.



German Irls.

Fig. 57.



Showing growth of plant, giving height
of leaves in relation to flowers.

**German Iris,
or
Iris Germanica.**

THE rainbow flower, which is commonly called the "flag," has long and large flaggy leaves, not unlike a two-edged sword. The stalks are round and smooth, growing from two foot to two foot six inches in height, bearing flowers towards the top which are composed of six petals joined together at the base, three of which stand rather upright, but slightly bent inwards towards each other, the other three hanging outward with rough hairy welts growing from the centre of the petals upwards, of a yellowish colour. One of the most interesting features of this iris is the angular character of the stalks. At each joint bursts forth a bud which is closely embraced by a leaf. On the page by the side of the flower studies, is a small sketch shewing the height of leaves in relation to the flowers.

FLOWERS. Blue, purple, lilac, and pearly grey, bearded with pale yellow to deep orange; the three outer hanging petals are wider than the three erect ones, and frequently deeper in colour.

PLACE. Marshes and moist ground.

TIME. May—July.

German Iris.

(Leaf growth.)

Fig. 58.



Side view of leaf.

**The Tomato,
or
Love Apple.**

*Lycopersicum
esculentum*, or
*Solanum
lycopersicum*.



Fig. 59.

THE plant from which this study was made was growing against a wall out of doors. The stem, both strong and vigorous, with a determined twist in places, is rather hairy and of a greyish green colour. The fruit and leaf stems are round. The leaves vary much

in shape and size, sometimes deeply incised and sometimes only slightly serrated; they are a soft green colour.

FLOWERS AND FRUIT. The flower is a small yellow one, growing upon a short stem, in clusters of five or six; when the flower falls the fruit appears in its place. This drawing is from a specimen of fruit which was only very slightly ribbed—some fruit having deep, strongly-marked grooves—the apple is a greenish yellow, turning to a rich red.

PLACE. It is a tender annual from South America, cultivated in this country both under glass and in the open.

TIME. Flowers in July and August. Fruit is ripe in August and September.



Tomato.

Fig. 60.

Honesty.

Lunaria biennis.

A PLANT which has been very much in demand amongst designers of the new school. The old-fashioned name was Satin Violet, which is by no means a bad name for it; it was also called the Penny Flower or Money Flower. The stalk is erect, hard, and round, slightly branched; the leaves are rather large, especially towards the base, and deeply toothed or dented, and of a warm green colour. The stalks are heavily laden with flowers not unlike the Damask Violet, of a pale purple colour. As the flower fades and falls there appears the seed vessel, which is a thin moon-shaped cod with a sharp point at the end; it is composed of three films or skins, the two outer ones are ash colour and the inner one to which the seeds cling is a clear shining silvery grey, as the old writers say: "Like a piece of white satten newly cut from the piece."

FLOWERS. It was impossible at the time this drawing was made to obtain flowers. It is universally acknowledged amongst ornamentists to be more serviceable to them in the seeding stage than in the flowering stage, which perhaps will make it unnecessary for me to apologise for publishing this drawing without the flowers; nevertheless I am sorry to do so.

PLACE. Cultivated in this country.

TIME. Flowers in April and May, the next year after the sowing.

Honesty.

Fig. 61.



**Broad-leaved
Plantain.**
Plantago major.

THE greater or broad-leaved plantain, sometimes called the way-brede, is abundantly and universally distributed by the roadsides, in meadow lands, and in our gardens. The old herbals are full of its commendation, with plenty of suggestions for its use in many directions. The leaf is large and ribbed, and grows direct from the root on a D shaped stem. From the flat surface of leaf-stem at the root springs forth the round flower stem, shooting up to a height of six or seven inches; from the middle upwards towards the top are closely packed small buds which bloom and fade rapidly. (See detail on plate.) As the flowers fade small husks develop, which contain a blackish seed.

FLOWERS. Present, when in full bloom, a fluffy appearance of a delicate pink and pale green colour. The little buds with their rose-coloured heads and green bodies, which are densely huddled together, standing erect in striking contrast to the broad, richly modelled leaves, are familiar to many of us.

PLACE. Almost everywhere in this country.

TIME. Mostly in June and July. Seed ripe in August.

**Broad-
leaved
Plantain.**

Fig. 62.

1
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N
C
H



Groundsel.

Senecio Vulgaris.

EVERYONE has at least a nodding acquaintance with the groundsel. In fact it is so well known that one is greatly tempted to adopt a favourite method of the old herbalists and say: "This plant is so common that everyone who hath eyes knows it, and he that hath none cannot read a description if I write it." My object in describing the plant in this sketch book is to add only those points which are necessary to make the drawings of practical value to the designer.

THE mediæval word for this plant was groundswyle, the Anglo-Saxon groundswelge signifying earth-glutton, or ground-devourer. The Latin word *senex*, an old man, from which the generic botanical name *senecio* was derived, is explained by an old herbal as follows: "The flower of this herbe hath white hair, and when the winde bloweth it away, then it appeareth like a bald-headed man," referring, of course, to the globular fluffy head that takes the place of the flower.

THE groundsel has a single round stalk, which is divided into many branches at the top, about a foot in height, and sometimes rather purplish in colour. The leaves are sharply divided into many lateral portions, as the ancient writers say: "It be much torne and deeply jagged upon both sides." They are of a dull dark green, occasionally clasping the stalk at the base, often stemmed, as will be seen by the drawing. The flowers grow in clusters, usually at the top.

FLOWERS. Form a minute disk of yellow rays,

Groundsel.

Fig. 63.

ONE
INCH



Groundsel.

about $\frac{1}{8}$ ths of an inch across, which quickly turns to white downy hair and is blown away.

PLACE. Meadows and particularly in swampy places.

TIME. All through the summer.

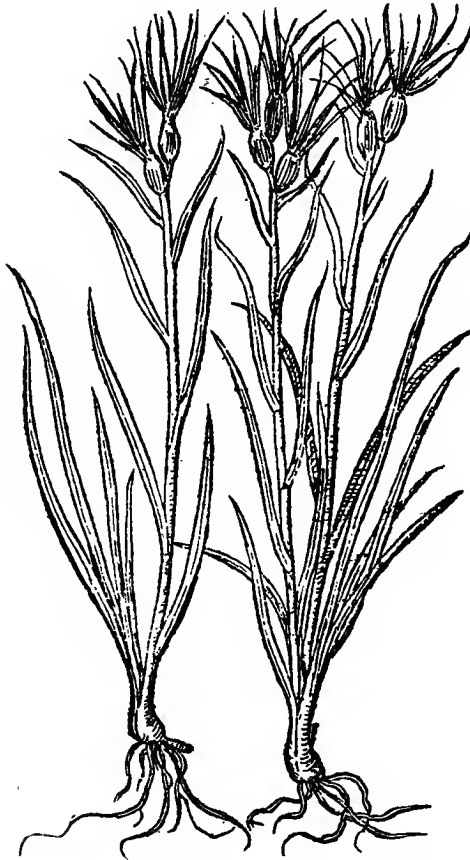
Hauer Grass.

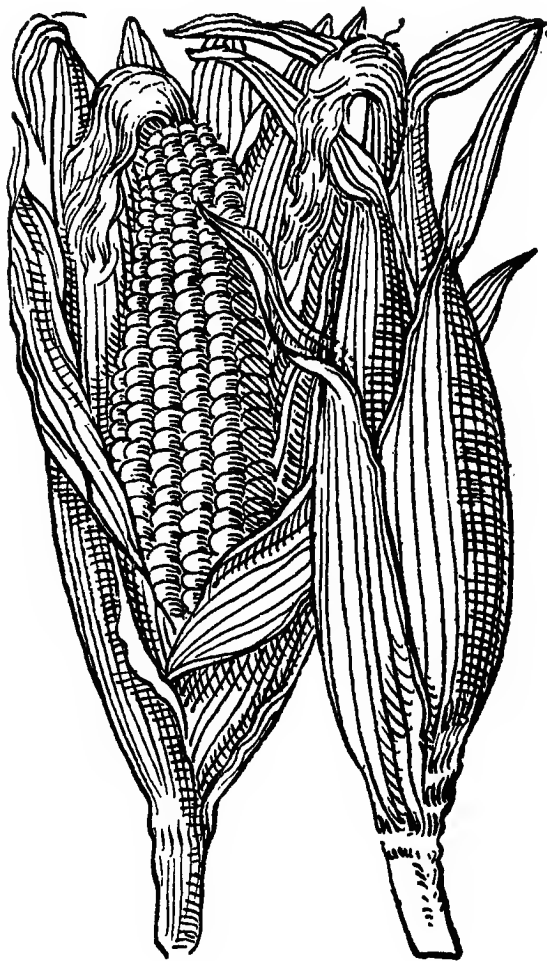
Festuca Italica.

From Gerarde's
Herball.

Fig. 64.

See page 124.





**Blew Turkey
Wheat,
or
Indian Corn.**

*Frumenti indica
spica.*

From Gerarde's
Herball.

Fig. 65.

See page 118.

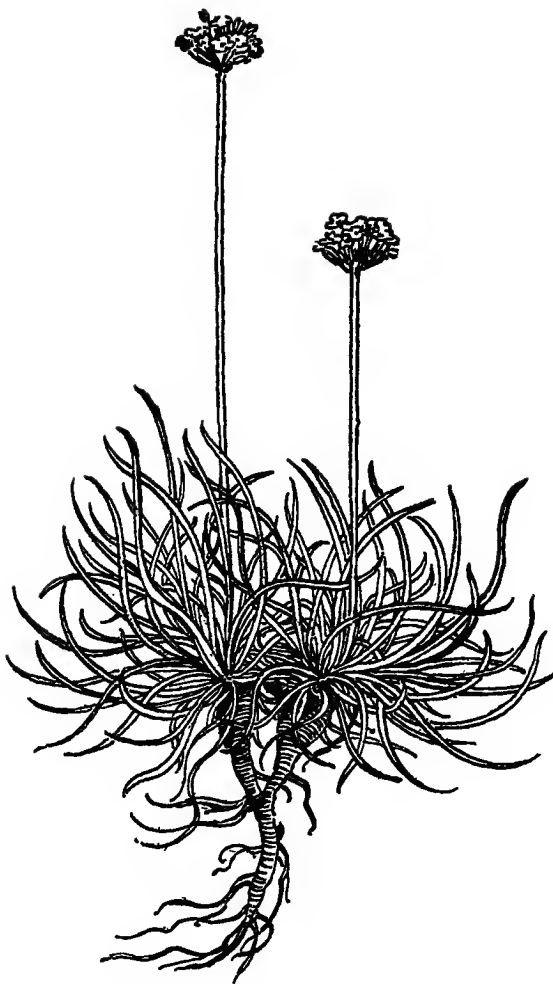
**Thrift,
or
Sea Gillofloure.**

*Caryophyllus
marinus minimus
Lobelij.*

From Gerarde's
Herball.

Fig. 66.

See page 126.

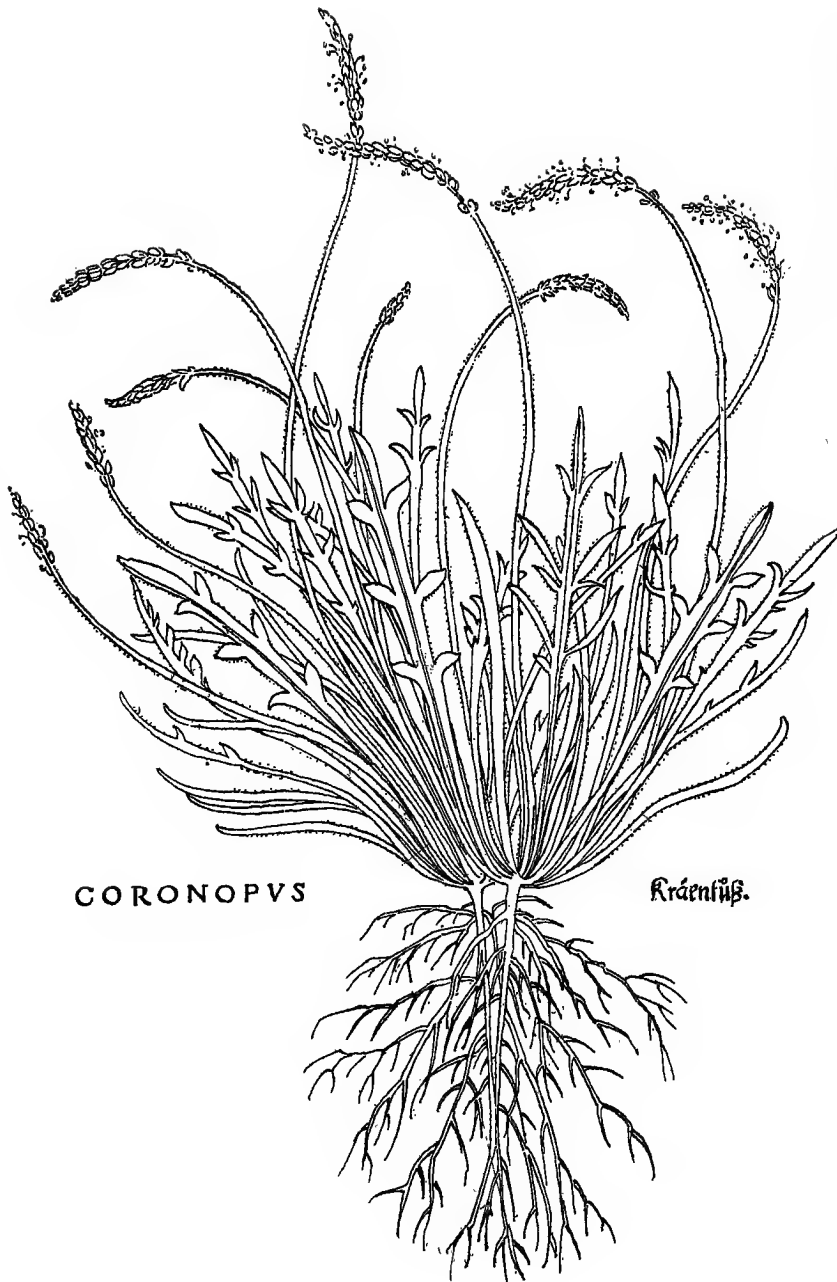


**Buck's-
horn
Plantain.**

From *De
Historia
Stirpium*, by
Leonharto
Fuchsius.

Fig. 67.

See page 126.



CORONOPVS

Kräutfuß.

Blue Delphinium, THE stem is smooth, erect, simple, purplish, rising
or
Larkspur. from one and a half to two feet in height. The

Delphinium ajacis. leaves are divided into five or seven lobes, with many small serrations, strongly veined, downy, and of a lightish green colour. The leaf stalks are long and the same colour as the stem, from which they spring alternately, becoming gradually smaller towards the top of the plant, where the flowers on long footstalks commence, and terminate the stem.

FLOWERS. From one to one and a half inches in diameter, hung on slender stalks without a calyx. The corolla is composed of five spreading petals, of which the uppermost is prolonged into a long hollow curved spur (hence the Latin word *Delphinus*, a dolphin, from the shape of this petal). This handsome flower is bluish or purplish with a yellow centre. The seeds are contained in a three lobed straight tapering capsule.

PLACE. Gardens, meadows and roadsides.

TIME. June—July.

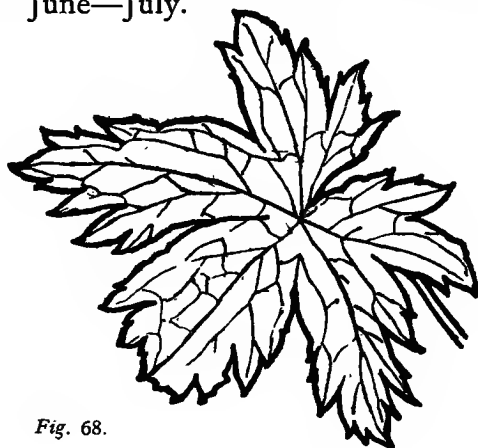


Fig. 68.

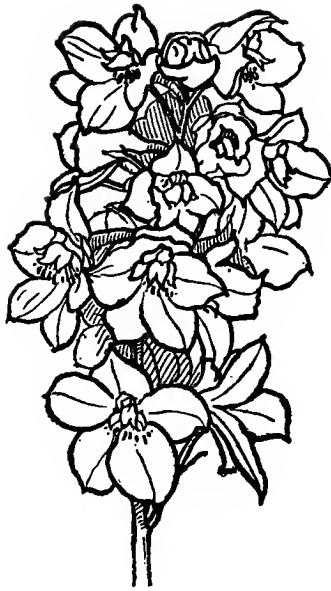
**Blue Delphinium,
or
Larkspur.**

Fig. 69.



**Blue
Delphinium,
or
Larkspur.**

Fig. 70.



Flowers at
termination
of stalk.



Flowers with
stem joint.

Canterbury Bell. *Campanula*
Medium. THIS fine plant, cultivated in the English garden, is full of beautiful decorative qualities, and needless to say a great friend to the designer. It grows about two feet high. The main stem is strong, hairy, and furrowed; from the setting on of the leaves come forth the footstalks of the flowers; they are long, narrow, and rough, serrated on their edges; near the ground, from four to five inches long, gradually becoming shorter towards the top of the plant; a number of small leaves accompanying the buds and flowers.

Canterbury Bell.

Fig. 71.



Canterbury Bell. FLOWER. Is large and rich in form, nestling in a well-designed cup; sometimes with five and sometimes six petals; it is either white, pink, purple or mauve.

PLACE. It grows naturally in Italy and Austria, cultivated in this country.

TIME. July—August. Seeds ripen in September.

**Small hard
Grass.**

*Gramen minus
Duriusculum.*

From Gerarde's
Herball.

Fig. 72.

See page 134.

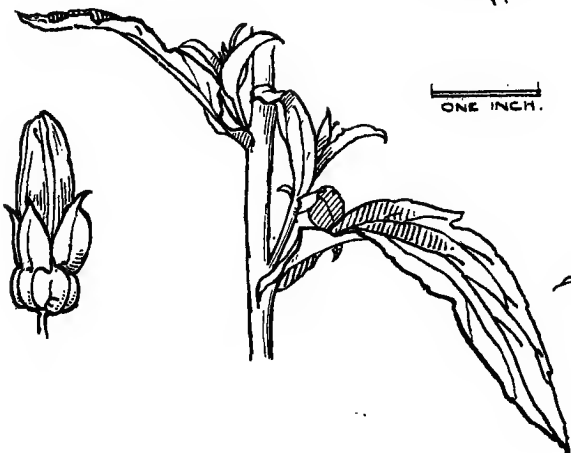
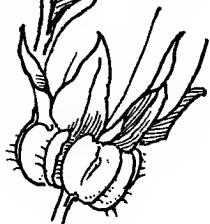


**Canterbury
Bell.**

Fig. 73.



Flower
Cups.



ONE INCH.



**Evening
Primrose.**

Oenothera biennis.

A **STOUT** herbaceous plant, growing from two to three feet high; stem often branched, with long, smooth, light green leaves; the lowest on stalks are larger than upper ones and rather waved. **FLOWERS**, which open in the evening and wither towards the middle of the next day, are delicately fragrant, have four petals, and are a fine pale yellow. The calyx reflexed; petals wedge-shaped, waved, standing equal and erect.

PLACE. It is common in gardens.

TIME. July—September.

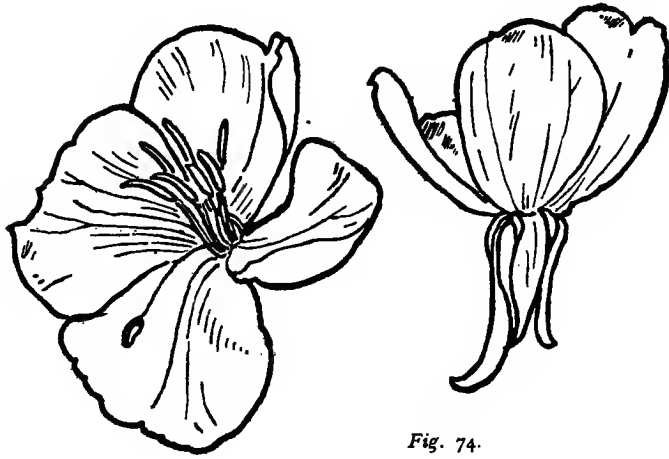


Fig. 74.

**Evening
Primrose.**

Fig. 75.



**Evening
Primrose.**

*Flowers, Buds,
and Joints.*

Fig. 76.



**Nettle-leaved
Bell-flower.**

*Campanula
Trachelium.*

THE nettle-leaved campanula has a stout, erect, simple stem, growing from eighteen inches to three feet high. The leaves bear considerable resemblance to those of the common nettle, are deep green and rough to the touch owing to the stiffness of the short, bristly hairs with which they are covered.

FLOWERS. In this order while presenting a series of constant variation for our enjoyment, be they bell-shaped, tazza-shaped, or broad bell-shaped, are still very much alike. They measure from one

**Nettle-leaved
Bell-flower,
or
Campanula.**

Fig. 77.



**Nettle-leaved
Bell-flower.**

and a quarter to two inches across, and are divided into five lobes; the calyx also is five lobed. The flower from which this drawing was made, was a bright bluish purple. The terminal flowers opening first, erect on short inclined stalks in the axils of the leaves, has three stigmas, with capsules nodding. PLACE. In woods and bushy places, generally distributed and common in the South of England. TIME. July.

**Meadow
Crane's-Bill.**
*Geranium
pratense.*

THE meadow crane's-bill is an erect but much-branched plant, which grows from one to two feet high. The stalks are long, round, and tender, with many deep, greatly divided leaves. Gerarde says: "The leaves are jagged in form like those of the field crowfoot." He speaks of the plant as the Crowfoot Crane's-Bill. The flowers grow at the top on delicate footstalks, and are a beautiful soft perfect blue; the seed vessel, which is a slender capsule about an inch long, comes forth as the flower departs, in form suggestive of the beak or bill of the crane; hence the name given to this plant.

FLOWERS. Blue, measuring from one to one and a half inches across. Is composed of five petals, ten stamens, and one pistil. The calyx consists of five pointed sepals.

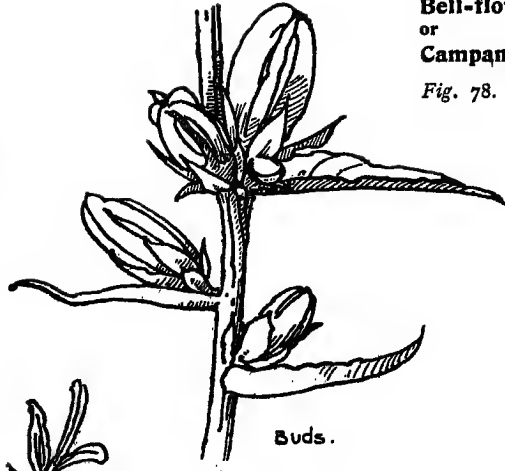
PLACE. Meadows and shady places, preferring valleys rather than mountains.

TIME. Flourishes most of the summer.

Nettle-leaved
Bell-flower,
or
Campanula,
Fig. 78.



side view
of flower.



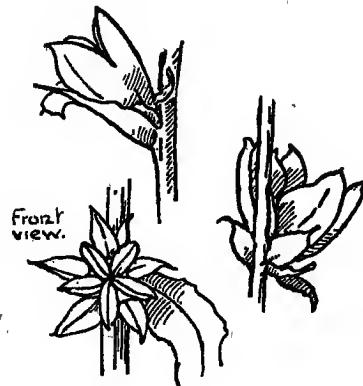
Buds.



ONE INCH.



Flower
centres.



Front
view.

**Meadow
Crane's-Bill.**

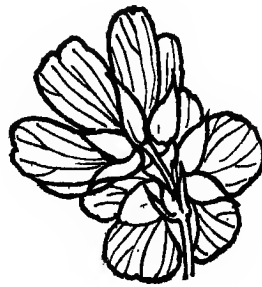
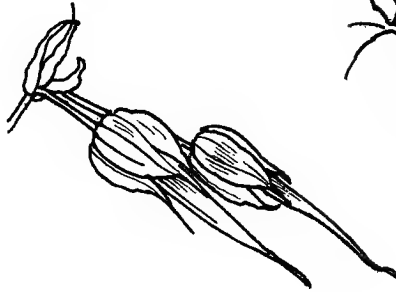
Fig. 79.



**Meadow
Crane's-
Bill.**

(Details.)

Fig. 80.





Yellow Iris.
Iris pseudacorus.
 Fig. 81.

THE yellow iris is found flourishing on the banks of our rivers, or rising from the bed of shallow streams; although it is called the water iris, and is always found—in its wild state—growing either in or near water, I have seen it thriving in gardens in low lying districts. Early writers call this flower of chivalry the “flag,” a name which doubtless was suggested by the three large fluttering petals which are continually waving in the breeze. The white iris is believed to be represented in the heraldic fleur-de-lys or fleur-de-louis, but it is not uncommon to hear the yellow iris spoken of as the fleur-de-lys; it is, however, less like the royal device in form than any member of the iris family, not having the large incurved petals in the centre of the flower. Compare it with the German iris, *Fig. 67.*

FLOWERS. Have no distinct calyx, but rise from a great sheathing bract, or nest of leaves, with

Yellow Iris.

Fig. 82.



Yellow Iris.

three outer petals reflexed forming the most conspicuous feature, and three small erect segments or petals in the centre ; three petaloid stigmas covering the stamens, all joined with a short tube : the seed capsule, which takes the place of the flower as it decays, is three inches long and one inch in diameter ; it has three cells. (See drawing in "G. C. Haite's Plant Studies.")

PLACE. Native of the Peninsula ; well distributed in this country.

TIME. Usually in bloom from the middle of May until the end of June.

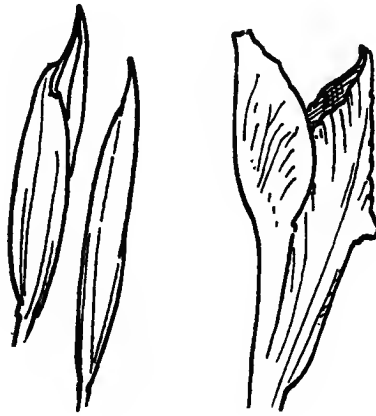
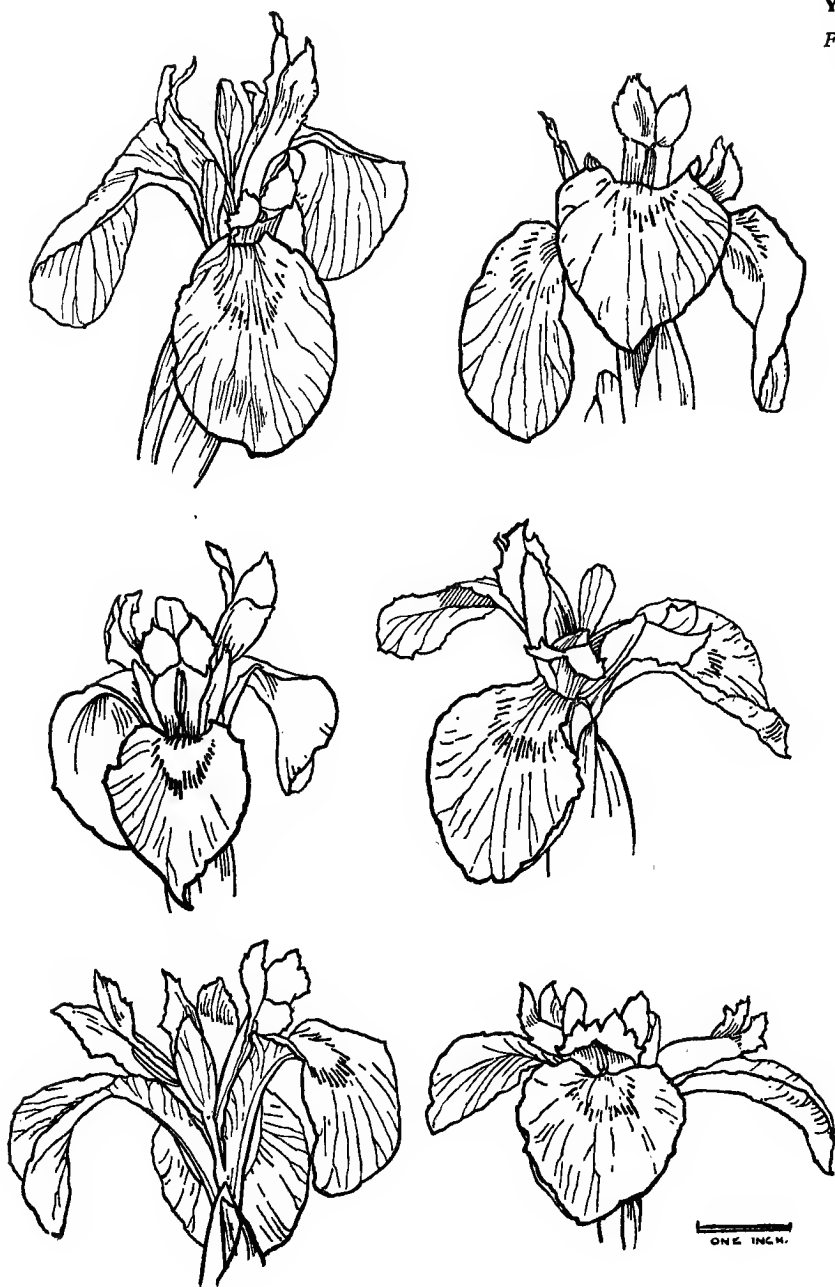


Fig.. 83.

Yellow Iris.

Fig. 84.



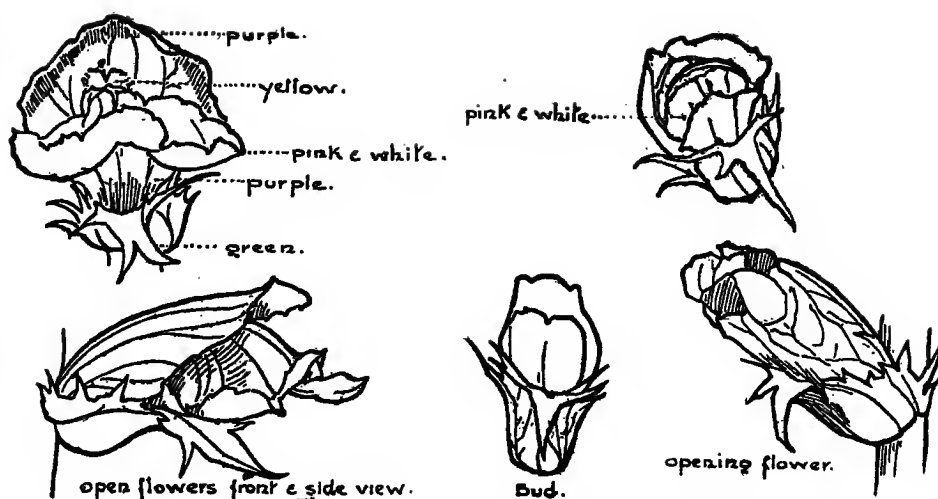


Fig. 85.

**Prickly-leaved
Acanthus.**

*Acanthus
Spinousus.*

THE acanthus is a strong, stately herbaceous plant, growing from three to four feet high, and flourishing in almost any soil or situation. It is conjectured that the leaf of this plant furnished the ancients with the elegant acanthus leaf of their architecture.

FLOWERS. Grow along the stem in the form of a cone, each blossom appearing to spring from the axil of a small, fresh green, stalkless leaf, purple outside, with touches of pink and white towards the ends of the petals, with a yellow centre.

PLACE. Brought from Italy in 1629. Grows freely in our gardens.

TIME. Flowers in August.

THE familiar story of the origin of the Corinthian Order, whether it has been contrived to give an

**Prickly-
leaved
Acanthus.**

Fig. 86.



**Prickly-leaved
Acanthus.**

interest to the invention or not, may bear repeating in this book of "Plant and Floral Studies," collected for those who make ornament, taking ideas and basing their patterns on plants. The story runs: "A young maiden of Corinth having died, her mother collected, in a basket, the toys which she had been fond of while alive, and carried them to her grave, where she left the basket covered with a tile to preserve its contents from the weather. The basket happened to be set upon the root of an acanthus. The plant being thus depressed in the middle, its leaves and stalks spread outwards, and grew up around the sides of the basket till they were bent down by the tile, which lay projecting over its top. At that time Callimachus, the sculptor, chanced to pass by the grave, and being pleased with the agreeable foliage and novelty of the form, he adopted the basket and leaves for the capital of a column, and thus established the capital of the Corinthian Order."

Sea Holly.
Eryngium
Campestre.

A THISTLY plant which grows about a foot high; the stem is round, thick and branched, of a milky green colour, except near the ground it is reddish. The leaves, which are also a soft whitish green, are somewhat round and thick, rather full or puckered at the edges with numerous sharp points, frequently set in couples along the stem, and round the flower is a cluster of five small prickly leaves placed in the form of a star.

Sea Holly.

Fig. 87.



Sea Holly.

FLOWER. A round prickly knob about the size of a nut, full of small blossoms, of pale celestial blue with light markings on the tips. The whorl of leaves in which the flower sits is also a pale bluish colour.

PLACE. On rough waste land along the sea coast.

TIME. Blossoms in June and July.

Traveller's Joy.

Clematis vitalba.

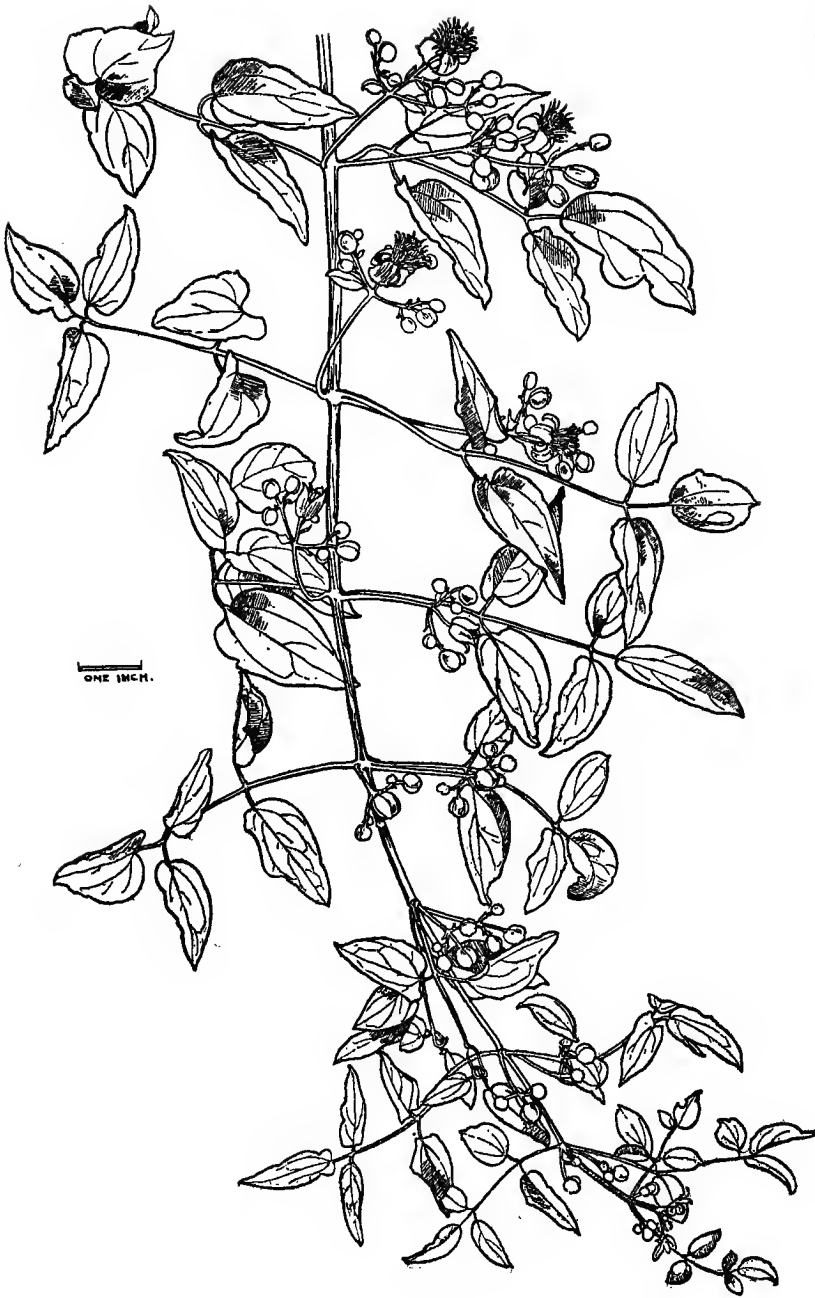
THIS wild clematis has very long and slender stalks, like the vine (the name *Clematis* from *Klema*, a vine branch), of a dark bronzy green colour. It is a great climber, stretching forth its sensitive leaf-stalks and hooking over every twig and available support within its reach. The leaves are large and numerous, placed opposite, rather waved, and a dark green colour.

FLOWERS. In loose clusters hanging from the axils on delicate footstalks are a greenish white, composed of four petal-like sepals with an indefinite number of stamens and pistils, about an inch across. As the flowers decay, tufts of flat seed develop with a fine white plume attached to each; in the winter making a great display, covering the hedges with their white feather-like heads. "Old Man's Beard" is a name frequently given to the plant.

PLACE. Hedgerows, preferring a moist soil.

TIME. July—September.

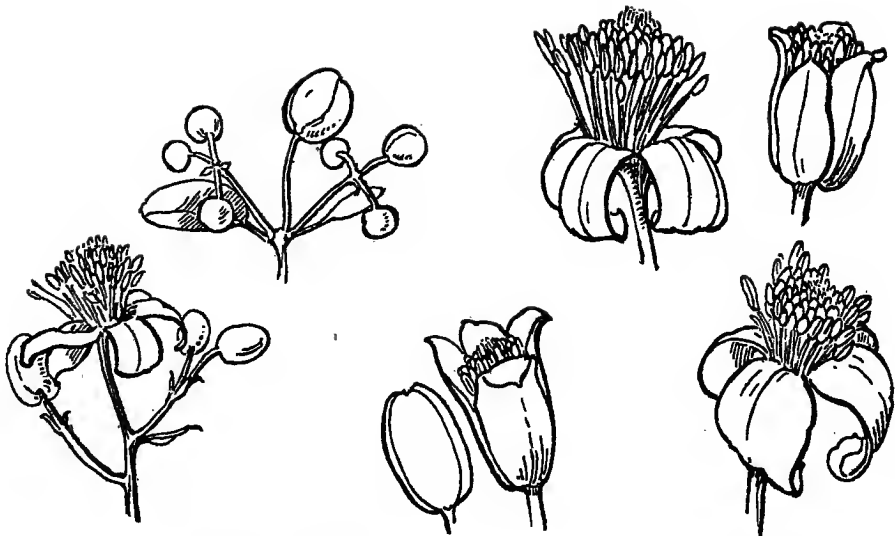
**Traveller's
Joy.**
Fig. 88.



**Traveller's
Joy.**

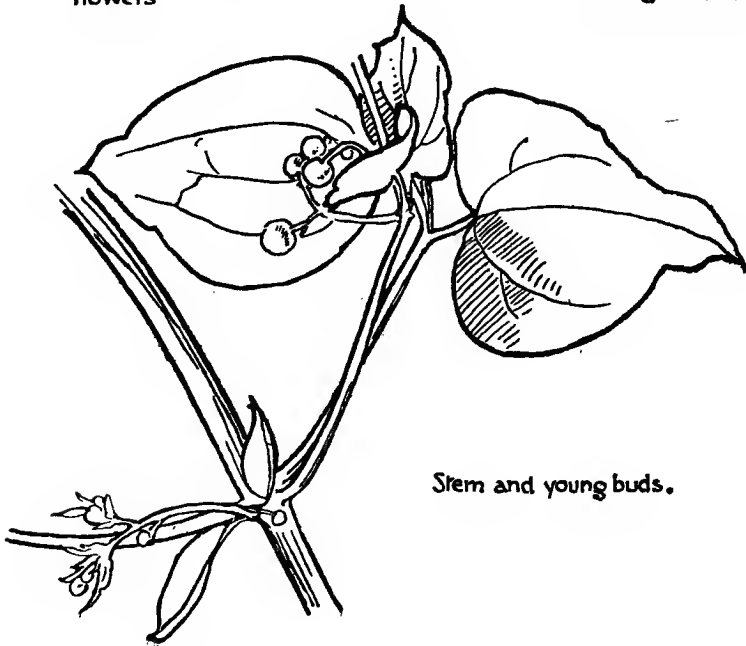
Details.

Fig. 89.



Buds and opening
flowers

Enlarged flowers.

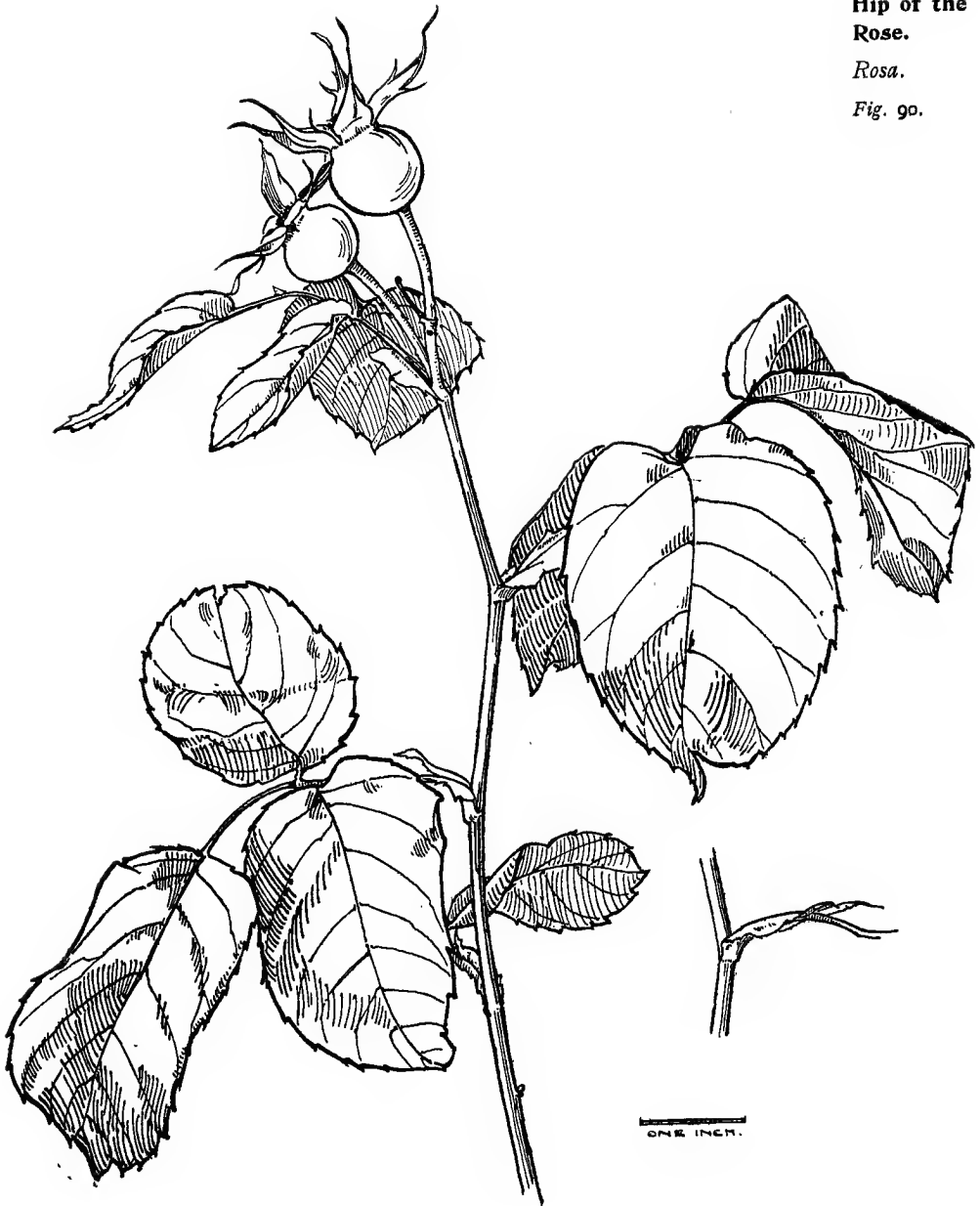


Stem and young buds.

**Hip of the
Rose.**

Rosa.

Fig. 90.



Hip of the Rose. *Rosa.* THIS drawing of seed vessels from a garden plant growing about seven feet high, is interesting owing to the very large oval leaf which remains quite green and fresh long after the roses have departed, and considerably after the fruit is ripe. The stem is long and angular, with several large thorns on the lower stalks, and none on the upper ones. Every stem joint is furnished with delicate stipules.

FRUIT. Solitary, round, rich scarlet forms with [five russet green sepals. Hips are described as merely the receptacular tube from the base of flower, which becomes fleshy and brightly coloured as an attraction to birds, which devour the hip and thus secure the dispersion of the seed.

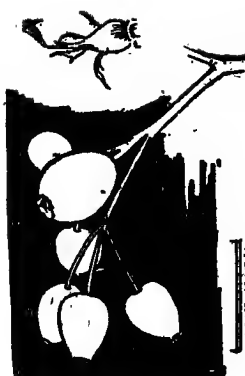
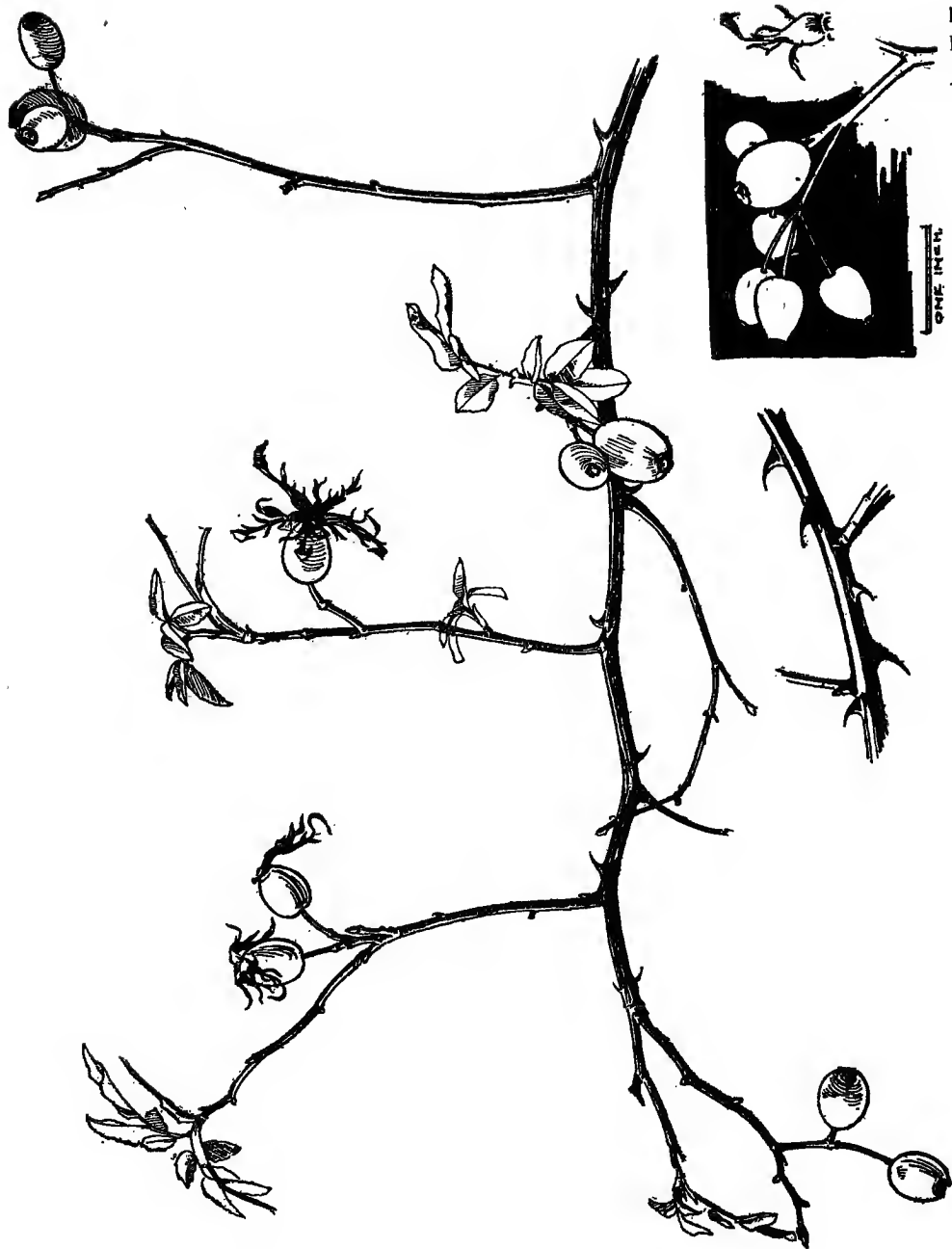
PLACE. A familiar garden plant.

TIME. Fruit ripe in October.

Hip of the Briar Rose. THIS fruit is in form a beautiful oval, narrowed a little towards one end, with long sepals which usually fall away as the fruit ripens and becomes a rich scarlet; the sepals, however, sometimes remain in a dried state on the hips. Drawn on this plate are a number of young leaves, which were quite green and fresh at the time the hips were mostly ripe. In some instances the stalks terminated with one hip, and sometimes with five or six together.

PLACE. In hedges and bushy places.

TIME. Ripe in October, by which time the sepals have mostly fallen.



Hip of the
Briar Rose.

Fig. 91.

**Cape
Goose-
berry.**

*Physalis
peruviana.*

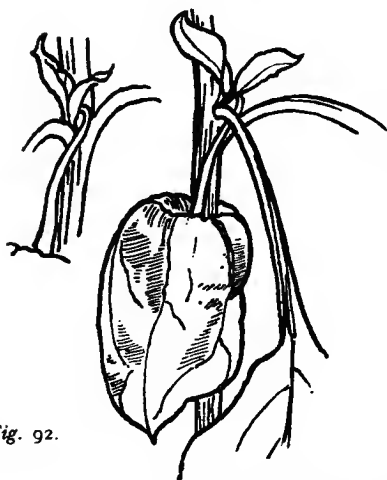
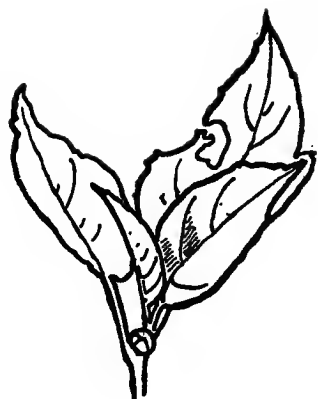
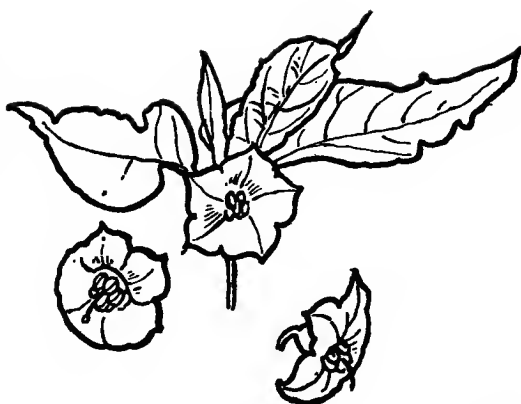


Fig. 92.

THE stem is strong, erect, branched and more or less hairy, growing from a foot and a half to three feet high. The leaves are stalked, egg-shaped, entire, sparingly waved and unevenly dented, of a dull or sullen green colour.

FLOWERS. Come forth from the joints singly, composed of a five-cleft, small, whitish, open bell-shaped corolla, with five stamens. Fruit, a red berry, encased in a loose, yellowish, thin skin or bladder—it might be better to call it an inflated five-

angled capsule—which ultimately becomes a rich orangy red. The word *physa* means a bladder, alluding to the calyx.

PLACE. Rich dry places. Hedge-sides and cultivated in gardens.

TIME. Flowers end of July. Fruit ripe end of August or early September.

**Cape
Gooseberry.**

Fig. 93.

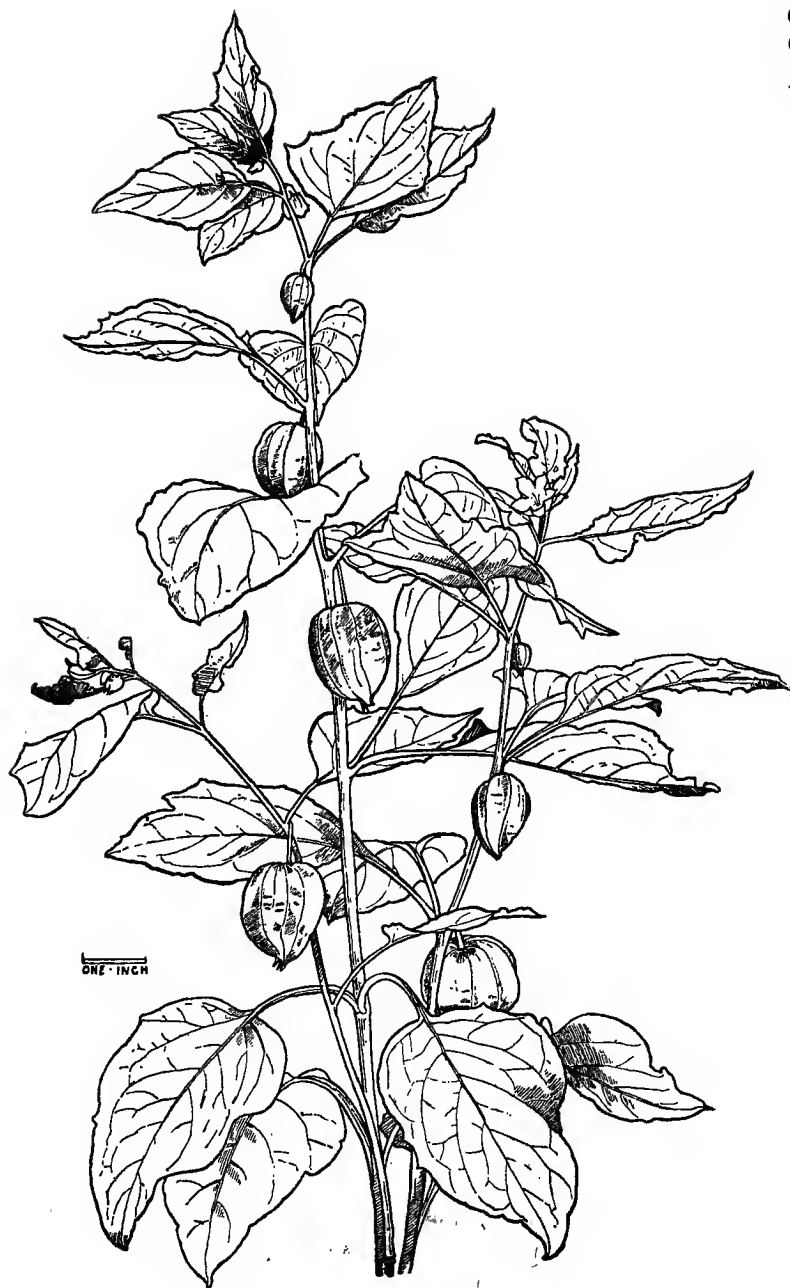




Fig. 94.

Burdock.

Arctium lappa.

THE burdock has a stout stem branching freely, from three to four feet high. The lower leaves are very large, sometimes a foot long, heart-shaped, stalked, and occasionally slightly serrated. The upper leaves are smaller; all are often covered on the under surface with grey, soft hairs. Botanists tell us it is not in any way related to the dock family. The person who is not too exacting, would, in judging from the size and character of the lower leaves, be quite willing to accept it as a near relation to the common dock, distinguishing it as the dock that bears burrs. The name *Arctium*, from *arktos*, a bear, in allusion to the rough, bristly fruit.

FLOWER - HEADS. Interminal, globular, involucre; the overlapping bracts, armed with hooked points. The florets are about half an inch in diameter, varying from mauve to white.

PLACE. This weed of the simplest culture is common on waste ground and by the roadsides.

TIME. Flowers expand in the latter part of the Summer and continue well into the Autumn.

Burdock.

Fig. 95.



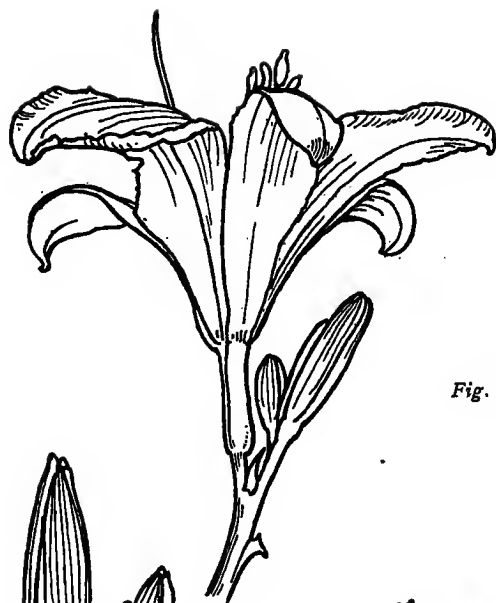


Fig. 96.

Day Lily.
Hemerocallis
flava.

THE long flaggy leaves have a strongly marked mid-rib, making a distinct groove down each leaf. The stem, which rises straight from a cluster of leaves, is round and bare, growing from two to three feet high, with small branches or arms towards the top, upon which grow many fine bell-shaped flowers,

Day
Lily.

Fig. 97.



Day Lily.

FLOWER. A deep cadmium yellow, from three to four inches across, consisting of six spreading petal-like segments, three large inter-petals wavy, and three small smooth; the tips slightly reflexed, with six stamens, reddish-brown anthers, and one pistil. The morning buds open out by noon, become full blown, and close in the evening of the same day; rapidly decaying. The name *hemera*, meaning a day, and *Kallos*, beauty—alluding to the beauty and duration of the flower.

PLACE. Flourishes in our gardens.

TIME. June.

Hip of the Rose.
Rosa indica.

THE seed vessel or “hip” of the *Rosa indica* is so attractive and different to the other rose fruit in this sketch book as to justify its appearance. It is an erect shrub, about two feet high, copiously provided with thorns of various sizes and shapes, which serve the purpose of enabling the plant to sustain itself amid other vegetation, and doubtless also to arrest the progress of undesirable visitants. The flower, in addition to its other charms, has a long blooming season, which is, moreover, repeated in the autumn.

FRUIT. Like the roses are produced at the ends of the shoots in loose clusters of a bright scarlet colour, crowned with five long golden brown sepals. Near the stem joints are several small green leaves.

PLACE. Well distributed in our gardens.

TIME. Fruit ripe in November.

**Hip of the
Rose.**

Rosa indica.

Fig. 98.



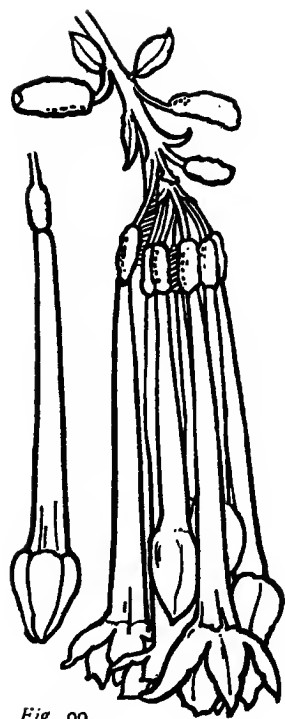


Fig. 99.

Flowers and buds.



Seed pod (enlarged).

Fuchsia.
Corymbiflora.

THIS fuchsia has been proved to be the most gigantic species at present known ; it grows from six to eight feet high, the smooth stem having many branches, with large, long-stalked, handsome heart-shaped leaves, slightly toothed, many veins, measuring from four to six inches long, with numerous small leaves ; all of a decidedly strong green.

FLOWERS. Grow in clusters, five or six together, on short stalks ; with small, tough, oval forms, like young seed vessels, out of which grow at great length

Fuchsia.

Fig. 100.



1 2 3 INCHES.

Fuchsia.

the tubercular perianth, divided into five segments, measuring about four inches in length, with five small inner petals. The whole a gallant scarlet, with yellow on the tips and a dark-red centre. The rough seed pod is green.

PLACE. Brought from South America in 1839. Grows freely in this country.

TIME. June—August.

**Blew Turkey
Wheat,
or
Indian Corn.**

*Frumenti
indica spica.*

Fig. 65.

THE Turkey wheat grows on strong, thick stems about five or six feet high, with many joints, of a dark brownish colour towards the bottom. At the top of the stalks grow idle or barren tufts like the Common Reed. Those ears which are fruitful grow upon the sides of the stalks, among the leaves which are thick and great, so covered with skins or films, that they cannot be seen until ripe, when they burst their covering and show themselves. At the end of the fruit comes forth a long slender beard, soft and tender, every one fibre being attached to its own seed. The leaves are broad, long and ribbed. The flower is either white, yellow, blue or purple; and the fruit, if from a white flower, is also white; from yellow, it is yellow; and so on.

PLACE. First introduced into Spain from America and not from the Turks' Dominions, as some people think.

TIME. It is sown in this country in March and April and the fruit is ripe in September.

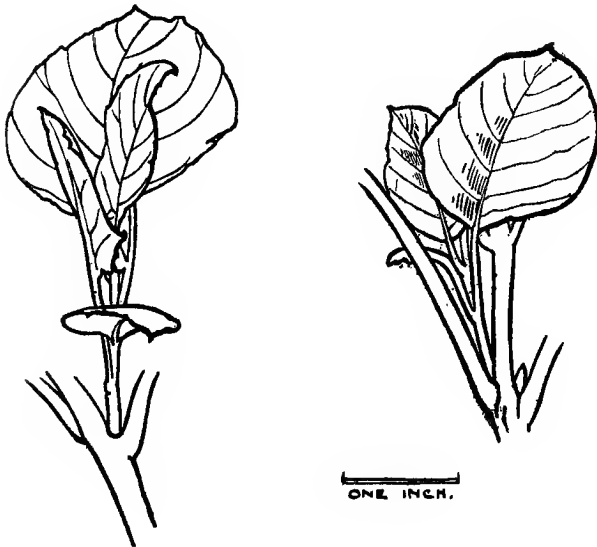
Fuchsia.

Fig. 101.



Growth of seed
pods.

Stem and
leaf joints.



Young growth.

ONE INCH.

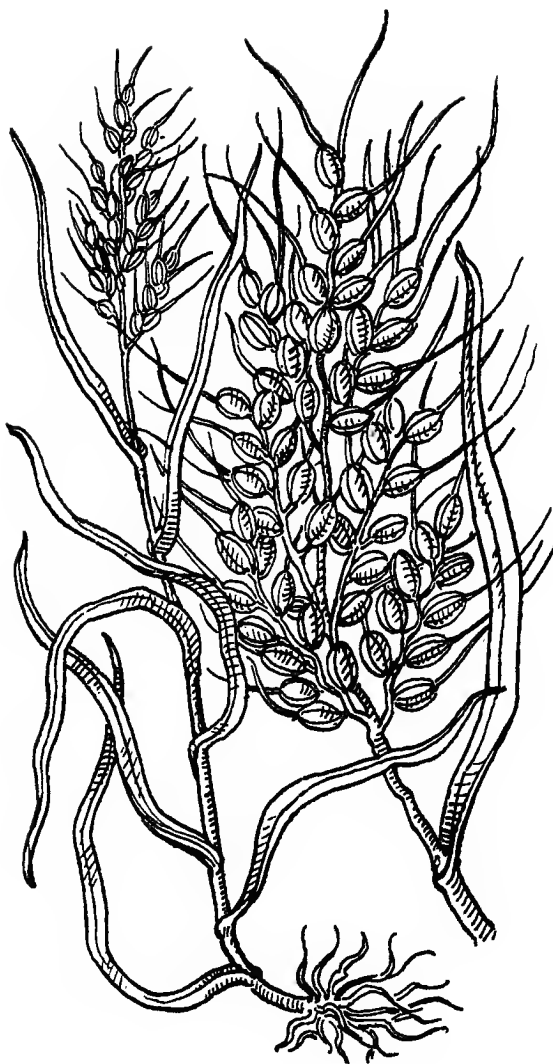
Rice.

Oryza.

From Gerarde's
Herball.

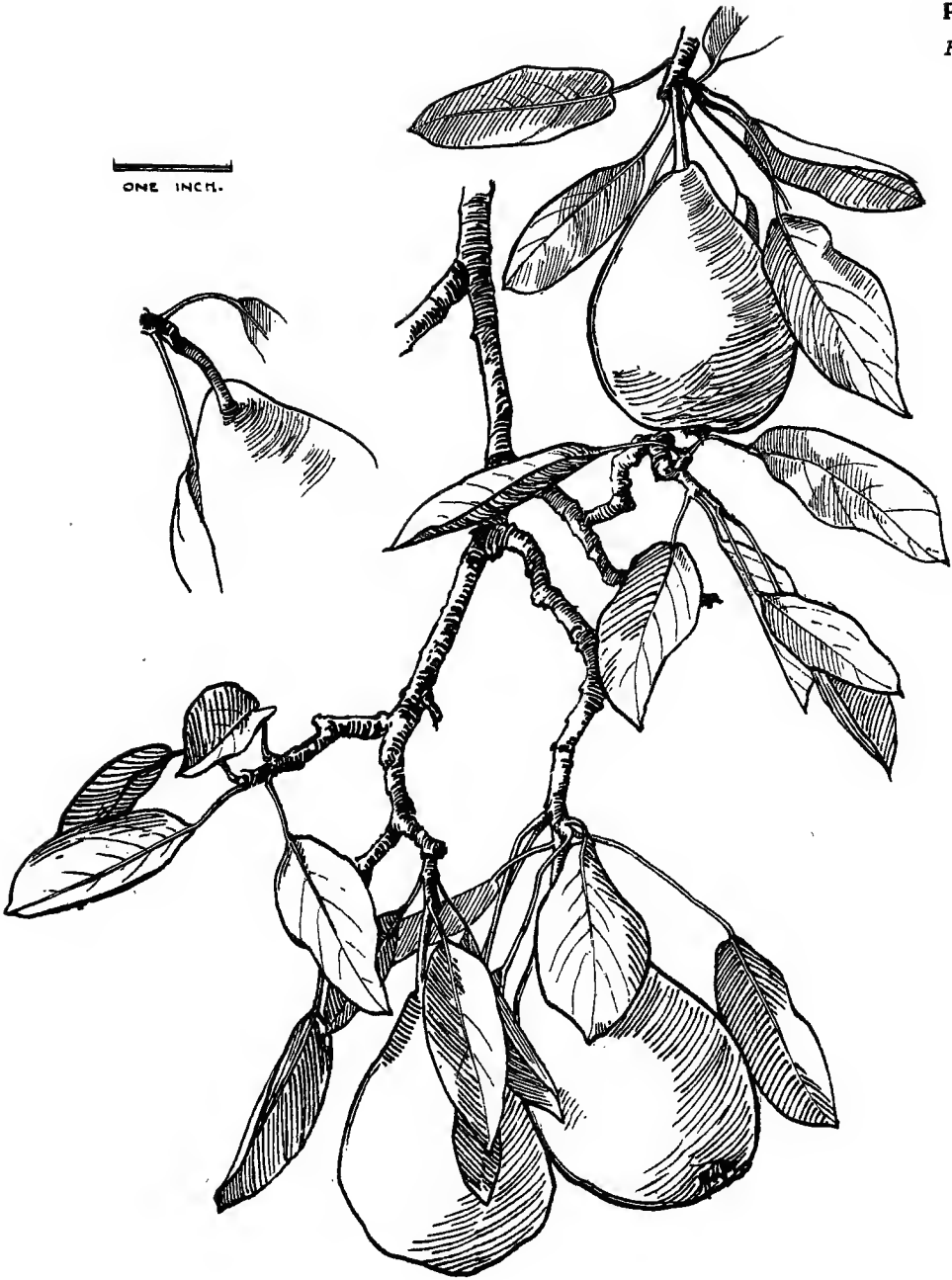
Fig. 102.

See page 134.



Pear.

Fig. 103.



Pear.

Pyrus sinai.

THE pear tree as a rule grows higher than the apple tree, and the boughs are more erect. The oblong leaf is narrow, smooth, without serrations but rather wavy, fresh green above and lighter beneath ; it is remarkable for its long, thin, graceful stalk, which, shooting from the rough branch, is arranged, with its companions, in a pleasant group round the joint of the fruit stalk, partly covering the hanging pear by the leaves. The flowers are white touched with pink, centres yellow.

FRUIT. Varying much in size, is a drop-shape. This drawing, from a pear known as *Marie Louise*, is small, but in most respects like other pears in form, when ripe is a golden green in colour.

TIME. Flowers in April, leaves afterwards, fruit ripe in September.

Apple.

Pyrus Malus.

THE apple tree does not grow to a great height ; it is provided with long arms or branches, rather rough, of a dark greyish brown colour. The oval leaf tapering towards the point, is serrated, has a strong mid-rib, with numerous veins branching mostly to the margin. A good medium green in colour with lighter green beneath. The leaf-stalk is smooth and nicely placed on the branch, frequently with a fresh pale green stigma at the joint.

FLOWER. Consisting of five petals, a five lobed calyx, and a number of stamens, is whitish, brushed with pink on the outside, yellow centre.

Apple.

Fig. 104.



Apple.

FRUIT. Varies both in size and shape, usually roundish, when ripe from yellows to brilliant reds.

TIME. Blossoms end of April, leaves developing later, fruit ripe July—September.

Lavender Spike.

Lavendula minor
five spica.

Fig. 56.

LAVENDER SPIKE has many stiff branches of a woody substance, growing up in the manner of a shrub; set with many long leaves, in couples. The flowers grow at the top of the branches spike fashion, of a blue colour.

PLACE. Planted in gardens in this country.

TIME. Flowers in June and July.

Hauer Grass.

Festuca Italica.

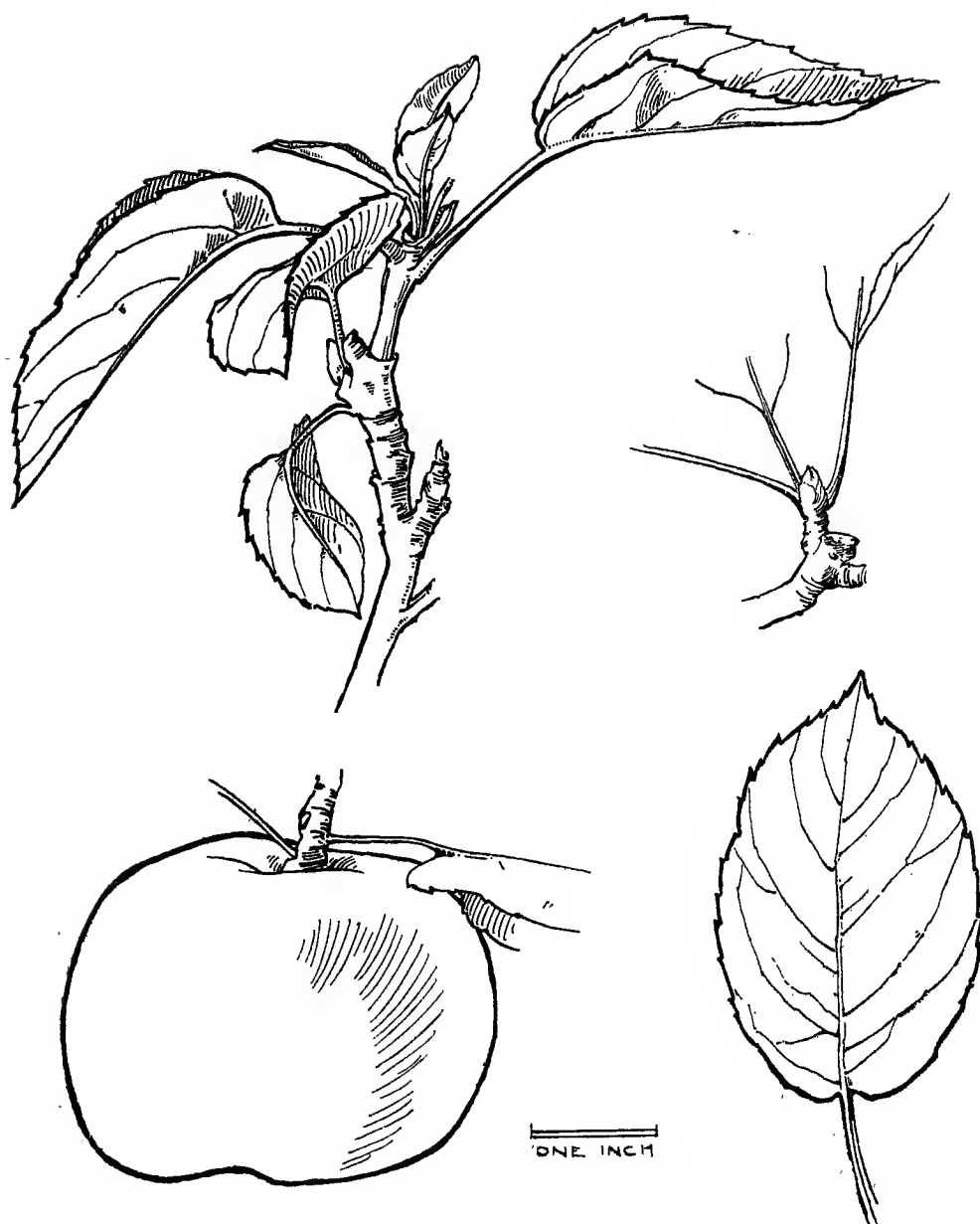
Fig. 64.

THE leaves and stalks of the hauer grass resemble wheat or barley. It grows about two feet high, having one or two small ears at the top of the stalk containing three seeds a little smaller than barley, each with a rigid spike at the end; these seeds are wrapped in a crested film or skin, out of which the spikes protrude.

PLACE. This grass grows amongst barley in Italy and other warm countries.

TIME. Through the summer.

Apple.
Details.
Fig. 105.



Thrift,
or
Sea Gilloflower.

Caryophyllus
marinus minimus
hobelij.

Fig. 66.

THRIFT, or sea gilloflower, produces great thick tufts of small, slender grassy leaves; from which rise erect, thin leafless stalks about nine inches high, upon the top; a cluster of small flowers, varying from a delicate oyster white, to a purplish colour.

PLACE. Thrift of this description is found in salt marshy places in England. It also thrives in our gardens.

TIME. May until the end of Summer.

Buck's-horn
Plantain.

Plantago
coronopus.

Fig. 67.

IN damp places the leaves are ascending and erect; in dry situations spreading flat upon the ground. They are very variable in size and also in the lobing, from one to twelve inches long; scapes from two to eighteen inches long, with slender spikes measuring from half an inch to two inches, recurved before the flowers expand. Anthers pale yellow.

PLACE. On sandy commons, roadsides, waste places and chalky banks. Rather common and generally distributed in England.

TIME. Spring and Autumn.

Anemone.

Fig. 106.



Anemone.
Anemone
Virginiana.

THIS modest fragile flower which stands alone upon a long slender stem, springing from a whorl of leaves, grows from two to three feet high. The leaves set in groups, at distances varying from four to six inches, are divided into three great, rather pointed, lobes, which are sub-divided into threes, with a clearly marked mid-rib to each of the great segments, and many small veins, producing a pleasant broken surface. The name of the *Vine-leaved Anemone* is sometimes given to this *Anemone Virginiana*.

FLOWERS. White, tinged externally with purple or pink. Solitary, measuring about two inches across, consisting of five delicate petal-like sepals and an indefinite number of yellow stamens.

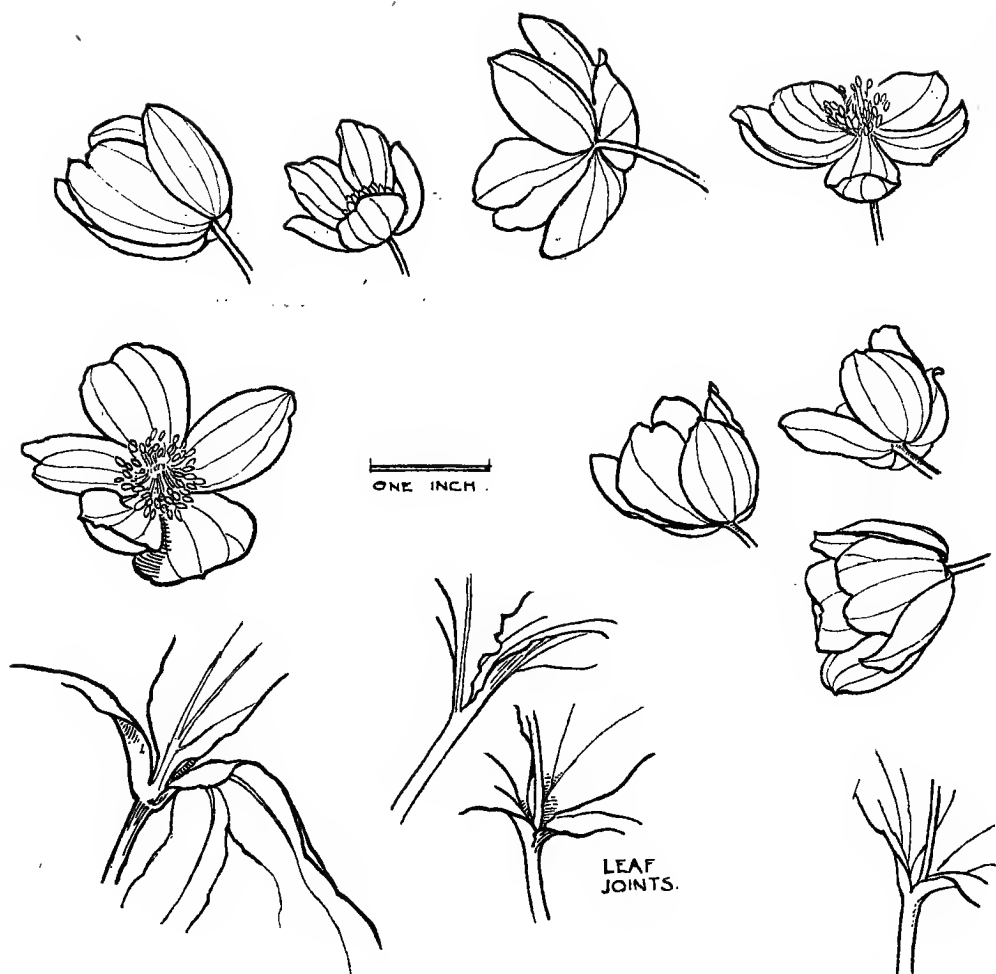
PLACE. Brought from North America in 1722, where it grows freely in the woods; it flourishes in our gardens.

TIME. Middle of May until early in July.

Anemone.

(Details.)

Fig. 107.



Nasturtium,
or
Indian Cress.

Tropæolum majus.

THE nature of the nasturtium is to trail along the ground, although it is a good climber. The stem, growing several feet, is round, smooth, branched, and succulent, of a soft yellow green; leaves roundish, wavy; veins radiating from the stalk-joint to the margin—the point from which they spring is placed on the near side of the leaf, about a third of the width distant from the edge—leaves are a medium greyish green above, light green below with veins the same colour.

FLOWERS. Solitary, at the ends of long, round, slender stalks, of a tawny yellow, orange, scarlet, and crimson, with dark markings from orange to chocolate: the calyx is large, and remarkable for its long spur, this horn-like nectarium behind projects just above the stalk-joint; the five sepals erect. Of the five roundish petals, the two uppermost are bent backwards, and the three lower are bearded as they narrow into their claw-like bases. Seed-vessel containing three adhering berries, compact, with deeply marked grooves.

PLACE. This plant is a native of Peru; towards the end of the 17th Century it was introduced into this country by Dr. Lumley Lloyd, and since that time has been constantly cultivated in British gardens.

TIME. June—October.

Nasturtium.

Fig. 108.





Fig. 109.

**Great flowered
Ox-eye.**

*Bupthalmum
Speciosissimum.*

THIS plant has a strong, round, simple, erect stem. It grows about six feet high, with flowers clustering mostly at the top. The big leaves clasping the stem, with wavy, slightly serrated edges, varying much in shape, but usually a long oval form tapering towards the point.

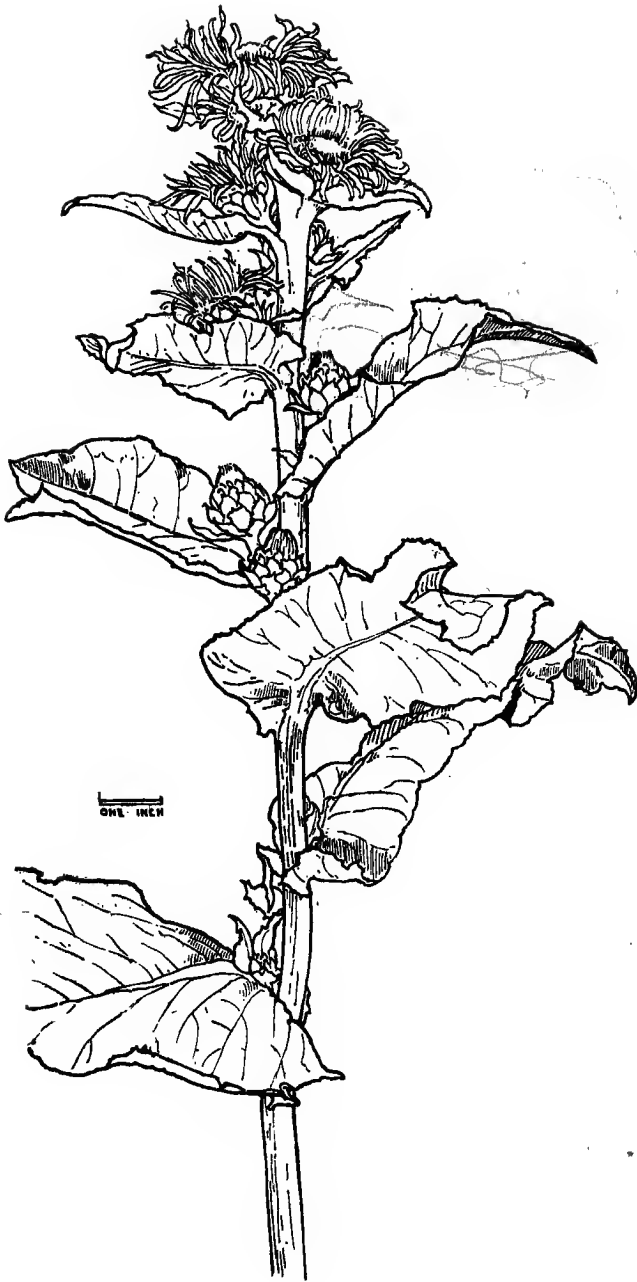
FLOWERS. Rich yellow, daisy-like forms, about two and a half to three inches across, with numerous narrow rays set round a deep orangy yellow disk, with calyx of many small sepals. This flower, seated in the axil of the leaf at the top—formed like a cup with a long lip—the well-proportioned, sturdy buds, and the large handsome leaves, make a most stimulating subject for the ornamentist.

PLACE. Low ground and marshy places.

TIME. July—September.

Great flowered
Ox-eye.

Fig. 110.



**Small Hard
Grass.**

*Gramen minus
durinfeulum.*

Fig. 72.

THE roots of small hard grass consist of a cluster of threads. The leaves, in tufts about an inch and a half long, are closely placed round the flower stem as it leaves the root, the ends opening out into a feathery bunch. The ears or flowers in the form of a spike on a long stem.

PLACE. Grows in moist, fresh marshes.

TIME. All through the Summer.

Rice.

Oryza.

Fig. 102.

THE leaves are fat and full of substance, not unlike the blades of leeks, but broader. The grain or seed is contained in a round husk like a small gooseberry with a long tail attached.

PLACE. It grows in water in Bactria, and near Babylon it grows six feet high, with many ears and plenty of seed.

TIME. It has a purple flower which blooms early in the Summer.

**Great flowered
Ox-eye.**

Fig. 111.



Small Lily.

*Alstræmeria
aurantiaca.*

WITH a straight, simple stem, from two feet to two feet six inches high; flowers clustering at the top in groups varying from three to ten or more; the leaves are sparingly distributed along the thin smooth stem, like short blades of grass, a fresh green colour.

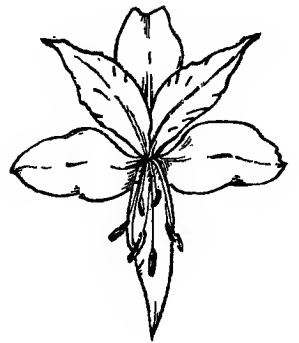
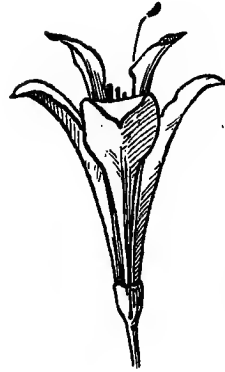
FLOWERS. Orange, the bell-shaped form divided into four spreading segments, with two narrower and longer inner petals, marked with chocolate or deep crimson spots; six stamens and one pistil. The seed vessel is a strongly ribbed, hexagonal, globular form, rapidly tapering at the top into a small pyramid, and the tail of the pistil frequently remaining.

PLACE. Common in gardens.

TIME. Flowers bloom July—September.

**Small
Lily.**

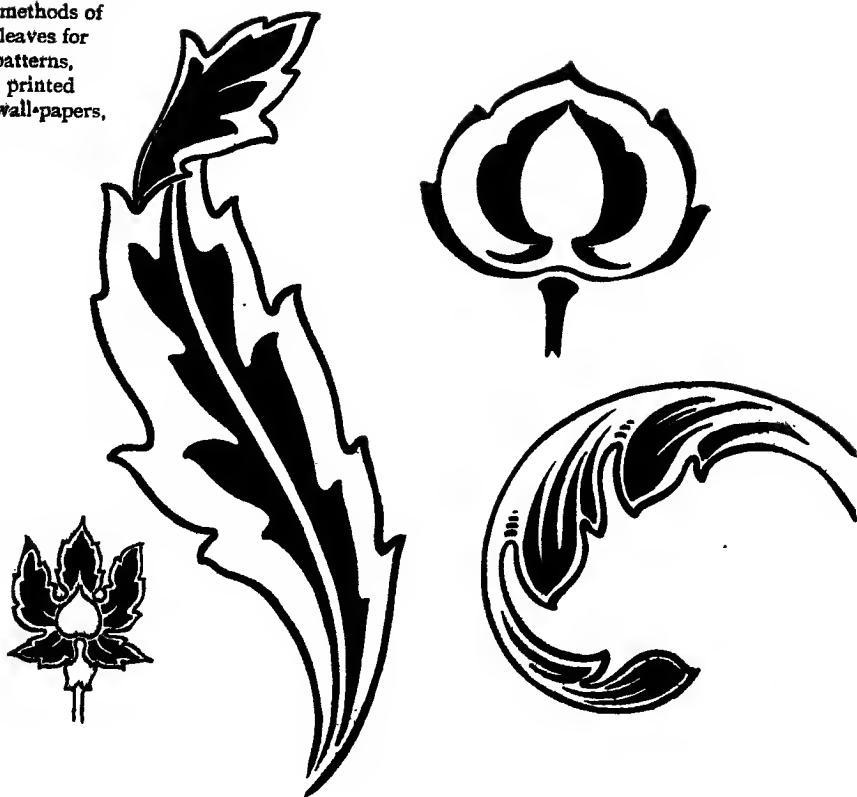
Fig. 112.



ONE INCH.

Various methods of
treating leaves for
surface patterns,
such as: printed
textiles, wall-papers,
etc.

Fig. 113.



Overlaid
pattern on
leaf, from
nature.



The large forms
purple, ground
soft yellow green.
veining from margin
to mid-rib in deep green.



Various
methods of
treating
leaves for
surface
patterns,
such as:
printed
textiles,
wall-papers,
etc.

Fig. 114.

THE END.

